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# **WATERBORNE COMMERCE OF THE UNITED STATES**

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Calendar Year 1997

**Part 5—  
National Summaries**

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Compiled under the supervision of  
the Water Resources Support Center  
U.S. Army Corps of Engineers  
Fort Belvoir, Virginia

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# Introduction

## General

*Waterborne Commerce of the United States, WCUS, Part 5 is one of a series of publications which provides statistics on the foreign and domestic waterborne commerce moved on the United States waters. WCUS, Parts 1-4 present detailed data on the movements of vessels and commodities at the ports and harbors and on the waterways and canals of the United States, and its territories. WCUS, Part 5 provides a condensation of this detailed information thereby providing the decision makers a broad perspective of commerce served by the U.S. waterways and ports.*

**WCUS, Part 5** provides extensive graphic and tabular displays of both current waterborne traffic and historic levels. Statistics are aggregated by region, state, port and waterway for comparative purposes.

**Data on foreign commerce are supplied to the Corps of Engineers by the Bureau of Census. Data for the compilation of the domestic statistics are collected by the Corps of Engineers, Department of the Army.**

The publication numbers and the geographical areas covered in **WCUS, Parts 1-5** are detailed below:

**WCUS, Part 1 Atlantic Coast**

**WCUS, Part 2 Gulf Coast, Mississippi River System and Antilles**

**WCUS, Part 3 Great Lakes**

**WCUS, Part 4 Pacific Coast, Alaska and Hawaii**

**WCUS, Part 5 National Summaries**

## Legal Authority

The legal authority for the collection, compilation and publication of waterborne commerce statistics by the Army Corps of Engineers is Section 11 of the Rivers and Harbors Appropriations Act of 1922 (42 Stat. 1043), as amended, and codified in 33 U.S.C. 555 and provides the following:

Owners, agents, masters, and clerks of vessels and other craft plying upon the navigable waters of the United States, and

all individuals and corporations engaged in transporting their own goods upon the navigable waters of the United States, shall furnish such statements relative to vessels, passengers, freight, and tonnage as may be required by the Secretary of the Army: Provided, That this provision shall not apply to those rafting logs except upon a direct request upon the owner to furnish specific information.

Every person or persons offending against the provisions of this section shall, for each and every offense, be liable to a fine of not more than \$5,000 or imprisonment not exceeding two months, to be enforced in any district court of the United States within whose territorial jurisdiction such offense may have been committed. In addition, the Secretary may assess a civil penalty of up to \$2,500 per violation, against any person or entity that fails to provide timely, accurate statements required to be submitted pursuant to this section by the Secretary.

The vessel and commodity movement information collected and compiled is designed to meet the data requirements of the Department of the Army in connection with the duties assigned by Congress. These data also provide valuable information for other governmental departments, commercial and shipping concerns and others interested in the U.S. transportation industry.

## Domestic Commerce

Contiguous and non-contiguous states and territories constitute the geographical space upon which domestic commerce may be transported. This includes Hawaii, Alaska, the 48 contiguous states, Puerto Rico and the Virgin Islands, Guam, American Samoa, Wake Island and the U.S. Trust Territories.

The waterborne traffic movements are reported to the Corps of Engineers by all vessel operators of record on ENG Forms 3925 and 3925b (or equivalent) approved by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3510(a)). The reports are generally submitted on the basis of individual vessel movements completed. For movements with cargo, the point of loading and the point of unloading of each individual commodity must be delineated. Cargo moved for the military agencies in commercial vessels is reported as ordinary commercial cargo; military cargo moved in Department of Defense vessels is not collected.

In summarizing the domestic commerce certain movements are excluded: Cargo carried on general ferries; coal and petroleum products loaded from shore facilities directly into bunkers of vessels for fuel; and insignificant amounts of government materials (less than 100 tons) moved on government owned equipment in support of Corps projects.

Beginning in 1996, fish are excluded from internal and intraport domestic traffic. The fish landing data is furnished by the National Marine Fisheries Service.

In tables containing domestic tonnage totals for the U.S., the commodity "Waterway Improvement Materials" is not included. "Waterway Improvement Materials" tonnage is included in domestic ports, waterways and waterway systems. This is the same procedure that has been used in years prior to 1990; therefore, the tonnages for years 1990 and later are comparable to tonnages in years prior to 1990.

### Foreign Commerce

Foreign commerce is waterborne import, export, and in-transit traffic between the United States, Puerto Rico and the Virgin Islands and any foreign country. These statistics do not include traffic between Guam, Wake Island and American Samoa and any other foreign country.

Foreign waterborne import and export statistics are derived primarily from data furnished to the Corps of Engineers by the Bureau of the Census and the U.S. Customs Service. In-transit statistics are derived primarily from data purchased from the Port Import Export

Reporting Service, Inc. and supplemented by data provided by Customs and Census.

The Republic of Panama is considered a foreign country. However, individual vessel movements with origin and destination at United States ports traveling via the Panama Canal are considered domestic traffic. Alaskan crude oil (origin at Valdez, AK) shipped via the Panama pipeline (west to east) and destined for gulf and east coast ports is also considered domestic commerce.

Import and export shipments for use of the United States Armed Forces abroad are not reported to the Waterborne Commerce Statistics Center (WCSC). Beginning with calendar year 1989 shipments under the military assistance program of the Department of Defense are included in the statistics under the appropriate commodity code. In prior years these cargoes were given as commodity code 9999.

### Commodity Descriptions

The first two digits of the WCSC publication codes correspond with the Lock Performance Monitoring System (LPMS) commodity codes. Both LPMS AND WCSC codes were standardized to reflect the hierarchical structure of the Standard Industrial Trade Classification (SITC) Revision 3 commodity codes. SITC, REV. 3 commodity codes conform to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3 allows direct comparisons with U.S. imports and exports, as well as, with commodity movements of other countries.

### Tonnage

The tonnage figures provided throughout the **WCUS, Parts 1-5** represent short tons (2000 pounds). Tonnage figures are rounded to the nearest 1000 tons.

A zero represents less than 500 tons but more than zero. Dashes mean zero tons. Columns and rows may not add up exactly to totals and subtotals due to rounding.

Some freight tables have "Total" and "Grand Total". The "Total" means that in some cases it is the total for domestic or foreign and Canadian traffic. The "Grand Total" specifically represents the sum total of all the different traffics, including all domestic and foreign traffic. If a particular

column or traffic type has only dashes and zeroes in the tonnage fields for that entire freight table then that column (traffic type) will not print.

#### **Ton-Miles**

For domestic movements, ton-miles equal the cargo tonnage times the distance between the point of loading on the water and the point of

unloading on the water. For U.S. - Canada movements on the Great Lakes, ton-miles equal the tonnage times the distance between the U.S. and Canadian locations. For overseas imports and exports, foreign ton-miles are computed by multiplying the cargo tonnage by the miles carried on U.S. waterways and channels. Ton-miles are rounded to the nearest million ton-miles.

# Terminology

## Types of Traffic

### *Foreign*

#### **Imports**

**Overseas:** Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses originating in foreign countries other than Canada.

**Canadian:** Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses originating in Canada.

#### **Exports**

**Overseas:** Outbound domestic merchandise and re-export of foreign merchandise from a U.S. foreign trade zone destined for foreign countries other than Canada.

**Canadian:** Outbound domestic merchandise and re-export of foreign merchandise from a U.S. foreign trade zone destined for Canada.

**In-transit Merchandise:** Merchandise coming into the United States from a foreign country and shipped to a foreign country without having been entered as an import. In-transit merchandise is treated as an **Import**, (inbound) when unloaded from a vessel and as an **Export**, (outbound) when loaded onto a vessel.

## Domestic

**Coastwise:** Domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico, (e.g. New Orleans to Baltimore, New York to Puerto Rico, San Francisco to Hawaii, Alaska to Hawaii). Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also termed **Coastwise**.

**Lakewise:** Waterborne traffic between the United States ports on the Great Lakes System. The Great Lakes System is treated as a separate waterway system rather than as a part of the inland waterway system. In comparing historical data for the Great Lakes System, one should note that prior to calendar year 1990, marine products, sand and gravel being moved from the Great Lakes to Great Lake destinations were classified as local traffic. From 1990 on, these activities are classified as lakewise traffic.

**Internal:** Vessel movements (origin and destination) which take place solely on inland waterways. An inland waterway is one geographically located within the boundaries of the contiguous 48 states or within the boundaries of the State of Alaska.

The term “internal traffic” is also applied to these vessel movements: those which involve carriage on both inland waterways and the Great Lakes; those occurring between offshore areas and inland waterways (e.g., oil rig supplies and fish); and those taking place within Delaware Bay, Chesapeake Bay, Puget Sound, and the San Francisco Bay, which are considered internal bodies of water rather than arms of the ocean.

**Intraport:** Movement of freight within the confines of a port whether the port has one or several arms or channels included in the port definition. This traffic type will not include car-ferry and general ferries moving within a port.

**Through:** Movements transiting a waterway, or stretch thereof, as defined in the project description of individual tables, and having origins and destinations outside of the defined area.

**Intra-waterway:** Movements within the limits of a river, waterway or canal. This traffic will not include car-ferry and general ferries moving within a waterway or Corps project.

**Intra-territory:** Traffic between ports in Puerto Rico and the Virgin Islands, which are considered a single unit.

## Traffic Direction

### Waterways

**Upbound:** Traffic that moves in an upstream direction. For waterways without a characteristic monodirectional flow (e.g. the Gulf Intracoastal Waterway), “upbound” means in a northerly or easterly direction.

**Downbound:** Traffic that moves in a downstream direction. For waterways without a characteristic monodirectional flow, “downbound” means in a southerly or westwardly direction.

**Inbound:** Traffic moving from one waterway into another where the destination is on the subject waterway.

**Outbound:** Traffic moving from one waterway into another where the origin is on the subject waterway.

### Ports

**Receipts:** Traffic moving from one location to another where the destination is within the limits of the subject port.

**Shipments:** Traffic moving from one location to another where the origin is within the limits of the subject port.

**Commodity Descriptions:** The first two digits of the Waterborne Commerce Statistics Center (WCSC) publication codes correspond with the Lock Performance Monitoring System, (LPMS), commodity codes. Both LPMS and WCSC codes were standardized to reflect the hierarchical structure of the Standard Industrial Trade Classification (SITC) Revision 3 commodity codes. SITC, Rev. 3 commodity codes conform to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3 allows direct comparisons with U.S. imports and exports, as well as with commodity movements of other countries.

**Tons:** The tonnage figures provided throughout the *Waterborne Commerce of the United States, WCUS, Parts 1-5* represent short tons (2000 pounds).

Where noted, tonnage figures are rounded to the nearest million. A zero represents less than 500,000 tons but more than zero. Dashes mean zero tons. Columns and rows may not add up exactly to totals and subtotals due to rounding.

**Ton-miles:** Water carriage ton-miles were first compiled and published in calendar year 1962. The distances used are statute miles. Domestic ton-miles are calculated by multiplying the tons of commerce being moved by the number of miles actually moved on the water (e.g. 50 short tons moving 200 miles on a particular waterway would yield 10,000 ton-miles for that waterway). The ton-mile parameter measures the total performance of a waterway. Ton-miles are not computed for ports.

For coastwise traffic this represents the mileage on the shortest route that safe navigation permits between the point of origin and destination. The source of this distance information for coastwise traffic is the publication, *Distance Between United States Ports*, published by the National Oceanic and Atmospheric Administration (1987).

For rivers and inland waterways the distances were computed from waterway survey maps and records of the Corps of Engineers.

For the Great Lakes system the ton-miles are computed for movements of cargo west of the

## TERMINOLOGY

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international boundary of St. Regis, Quebec, Canada to head of Lake Superior at Duluth, MN and Superior, WI.

For Canadian imports and exports, foreign ton-miles are computed as the tonnage times the distance between the U.S. and Canadian ports.

For lakewise domestic movements, ton-miles equal the cargo tonnage times the distance between the U.S. Great Lakes ports.

For overseas imports and exports, foreign ton-miles are computed by multiplying the cargo tonnage by the miles carried on U.S. waterways and channels.

Ton-miles are rounded to the nearest million.

**Trans-Shippments:** Ports and offshore anchorages where cargo is moved from one vessel to another.

These are: St. Lucia, Virgin Islands; Heald Bank off the Louisiana and Texas coasts; Chirqui Grande, Panama; Puerto Armuelles, Panama; and Hondo Platform-Pacific Ocean.

## Commodity Classification List

<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group</u>	<u>Pub Name</u>	<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group</u>	<u>Pub Name</u>
00 Units				3281	Radioactive Material		
	0200 Vehicles			3282	Pigments & Paints		
	0300 Passengers			3283	Coloring Mat. NEC		
10 Coal				3284	Medicines		
	1100 Coal			3285	Perfumes & Cleansers		
	1200 Coal Coke			3286	Plastics		
20 Petroleum & Petroleum Products				3291	Pesticides		
21 Crude Petroleum				3292	Starches,Gluten,Glue		
	2100 Crude Petroleum			3293	Explosives		
22-29 Petroleum Products				3297	Chemical Additives		
	2211 Gasoline			3298	Wood & Resin Chem.		
	2221 Kerosene			3299	Chem. Products NEC		
	2330 Distillate Fuel Oil			40	Crude Materials, Inedible Except Fuels		
	2340 Residual Fuel Oil			41	Forest Products, Wood and Chips		
	2350 Lube Oil & Greases			4110	Rubber & Gums		
	2410 Petro. Jelly & Waxes			4150	Fuel Wood		
	2429 Naphtha & Solvents			4161	Wood Chips		
	2430 Asphalt, Tar & Pitch			4170	Wood in the Rough		
	2540 Petroleum Coke			4189	Lumber		
	2640 Liquid Natural Gas			4190	Forest Products NEC		
	2990 Petro. Products NEC			42	Pulp and Waste Paper		
30 Chemicals and Related Products				4225	Pulp & Waste Paper		
31 Fertilizers				43	Soil, Sand, Gravel, Rock and Stone		
	3110 Nitrogenous Fert.			4310	Building Stone		
	3120 Phosphatic Fert.			4322	Limestone		
	3130 Potassic Fert.			4323	Gypsum		
	3190 Fert. & Mixes NEC			4327	Phosphate Rock		
32 Other Chemicals and				4331	Sand & Gravel		
	Related Products			4333	Dredged Material		
	3211 Acyclic Hydrocarbons			4335	Waterway Improv. Mat		
	3212 Benzene & Toluene			4338	Soil & Fill Dirt		
	3219 Other Hydrocarbons			44	Iron Ore and Scrap		
	3220 Alcohols			4410	Iron Ore		
	3230 Carboxylic Acids			4420	Iron & Steel Scrap		
	3240 Nitrogen Func. Comp.			45	Marine Shells		
	3250 Organo-Inorganic Comp.			4515	Marine Shells		
	3260 Organic Comp. NEC			46	Non-Ferrous Ores and Scrap		
	3271 Sulphur (Liquid)			4630	Copper Ore		
	3272 Sulphuric Acid			4650	Aluminum Ore		
	3273 Ammonia			4670	Manganese Ore		
	3274 Sodium Hydroxide			4680	Non-Ferrous Scrap		
	3275 Inorg. Elemt.,Oxides,			4690	Non-Ferrous Ores NEC		
	& Halogen Salts			47	Sulphur, Clay and Salt		
	3276 Metallic Salts			4741	Sulphur, (Dry)		
	3279 Inorganic Chem. NEC			4782	Clay & Refrac. Mat.		
				4783	Salt		
				48	Slag		
				4860	Slag		

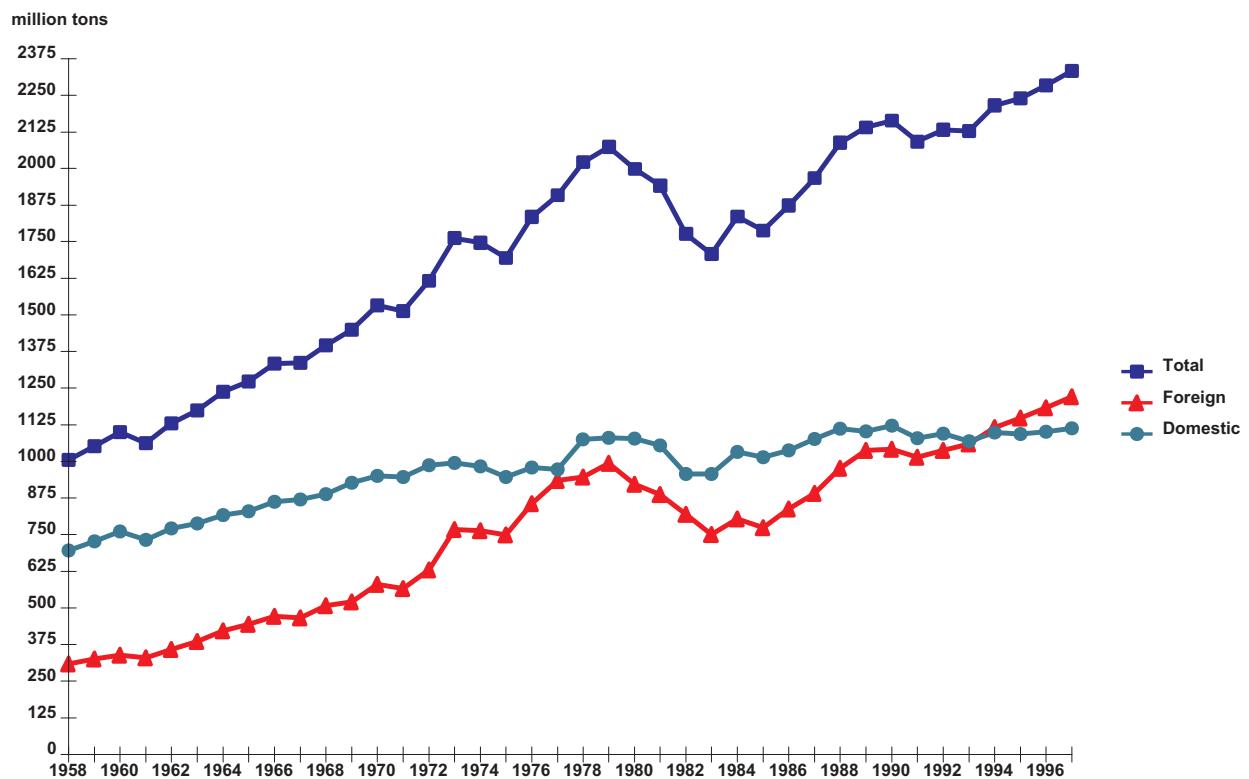
## Commodity Classification List (continued)

<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group</u>	<u>Pub Name</u>	<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group</u>	<u>Pub Name</u>
49 Other Non-Metal. Min.				6781	Hay & Fodder		
	4900 Non-Metal. Min. NEC			6782	Animal Feed, Prep.		
50 Primary Manufactured Goods				68	Other Agricultural Products		
51 Paper Products				6811	Meat, Fresh, Frozen		
	5110 Newsprint			6817	Meat, Prepared		
	5120 Paper & Paperboard			6822	Dairy Products		
	5190 Paper Products NEC			6835	Fish, Prepared		
52 Lime, Cement and Glass				6838	Tallow, Animal Oils		
	5210 Lime			6839	Animals & Prod. NEC		
	5220 Cement & Concrete			6856	Bananas & Plantains		
	5240 Glass & Glass Prod.			6857	Fruit & Nuts NEC		
	5290 Misc. Mineral Prod.			6858	Fruit Juices		
53 Primary Iron and Steel Products				6861	Sugar		
	5312 Pig Iron			6865	Molasses		
	5315 Ferro Alloys			6871	Coffee		
	5320 I&S Primary Forms			6872	Cocoa Beans		
	5330 I&S Plates & Sheets			6885	Alcoholic Beverages		
	5360 I&S Bars & Shapes			6887	Groceries		
	5370 I&S Pipe & Tube			6888	Water & Ice		
	5390 Primary I&S NEC			6889	Food Products NEC		
54 Primary Non-Ferrous Metal Products				6891	Tobacco & Products		
	5421 Copper			6893	Cotton		
	5422 Aluminum			6894	Natural Fibers NEC		
	5429 Smelted Prod. NEC			6899	Farm Products NEC		
55 Primary Wood Products; Veneer				70	All Manufactured Equipment, Machinery and Products		
	5540 Primary Wood Prod.			7110	Machinery (Not Elec)		
60 Food and Farm Products				7120	Electrical Machinery		
61 Fish				7210	Vehicles & Parts		
	6134 Fish (Not Shellfish)			7220	Aircraft & Parts		
	6136 Shellfish			7230	Ships & Boats		
62-64 Grain				7300	Ordnance & Access.		
	6241 Wheat			7400	Manufac. Wood Prod.		
	6344 Corn			7500	Textile Products		
	6442 Rice			7600	Rubber & Plastic Pr.		
	6443 Barley & Rye			7800	Empty Containers		
	6445 Oats			7900	Manufac. Prod. NEC		
	6447 Sorghum Grains			80	Waste and Scrap NEC		
65 Oilseeds				8900	Waste and Scrap NEC		
	6521 Peanuts			90	Unknown or Not Elsewhere Classified		
	6522 Soybeans			99	Unknown or Not Elsewhere Clsfld		
	6534 Flaxseed			9900	Unknown or NEC		
	6590 Oilseeds NEC						
66 Vegetable Products							
	6653 Vegetable Oils						
	6654 Vegetables & Prod.						
67 Processed Grain and Animal Feed							
	6746 Wheat Flour						
	6747 Grain Mill Products						

## **Section 1**

### **National Summaries**

*Figure 1-2*  
TOTAL WATERBORNE COMMERCE OF THE U.S., 1958-1997  
(million short tons)



*Table 1-1: TOTAL WATERBORNE COMMERCE OF THE U.S., 1958-1997  
(in short tons of 2000 pounds)*

Year	Total	Foreign	Domestic
1958	1,004,515,776	308,850,798	695,664,978
1959	1,052,402,102	325,669,939	726,732,163
1960	1,099,850,431	339,277,275	760,573,156
1961	1,062,155,182	329,329,818	732,825,364
1962	1,129,404,375	358,599,030	770,805,345
1963	1,173,766,964	385,658,999	788,107,965
1964	1,238,093,573	421,925,133	816,168,440
1965	1,272,896,243	443,726,809	829,169,434
1966	1,334,116,078	471,391,083	862,724,995
1967	1,336,606,078	465,972,238	870,633,840
1968	1,395,839,450	507,950,002	887,889,448
1969	1,448,711,541	521,312,362	927,399,179
1970	1,531,696,507	580,969,133	950,727,374
1971	1,512,583,690	565,985,584	946,598,106
1972	1,616,792,605	629,980,844	986,811,761
1973	1,761,552,010	767,393,903	994,158,107
1974	1,746,788,544	764,088,905	982,699,639
1975	1,695,034,366	748,707,407	946,326,959
1976	1,835,006,819	855,963,909	979,042,910
1977	1,908,223,619	935,256,813	972,966,806
1978	2,021,349,754	946,057,889	1,075,291,865
1979	2,073,757,628	993,444,963	1,080,312,665
1980	1,998,887,402	921,404,000	1,077,483,402
1981	1,941,558,947	887,102,150	1,054,456,797
1982	1,776,740,579	819,730,983	957,009,596
1983	1,707,661,011	751,140,194	956,520,817
1984	1,836,020,619	803,338,133	1,032,682,486
1985	1,788,434,822	774,323,283	1,014,111,539
1986	1,874,416,280	837,223,503	1,037,192,777
1987	1,967,458,261	890,980,045	1,076,478,216
1988	2,087,993,484	976,220,985	1,111,772,499
1989	2,140,442,372	1,037,910,213	1,102,532,159
1990	2,163,854,373	1,041,555,740	1,122,298,633
1991	2,092,108,462	1,013,557,036	1,078,551,426
1992	2,132,095,154	1,037,466,130	1,094,629,024
1993	2,128,221,188	1,060,041,217	1,068,179,971
1994	2,214,754,086	1,115,742,828	1,099,011,258
1995	2,240,393,059	1,147,357,782	1,093,035,277
1996	2,284,065,249	1,183,386,621	*1,100,678,628
<b>1997</b>	<b>2,333,142,046</b>	<b>1,220,615,132</b>	<b>1,112,526,914</b>

\*Beginning in 1996, fish was excluded for internal and intraport domestic traffic.

**Table 1-2: FOREIGN WATERBORNE COMMERCE OF THE U.S., 1958-1997**  
 (in short tons of 2000 pounds)

Year	Imports				Exports			
	Total	Coastal	Great Lakes		Total	Coastal	Great Lakes	
			Canadian	Overseas			Canadian	Overseas
1958	189,484,551	181,480,343	7,656,590	347,618	*119,366,247	101,554,806	17,429,825	360,159
1959	213,485,323	198,607,603	13,794,435	1,083,285	*112,184,616	91,629,487	17,700,427	2,833,118
1960	211,316,497	198,465,746	11,973,635	877,116	127,960,778	104,810,455	19,168,514	3,981,809
1961	200,165,652	188,179,228	11,007,197	979,227	129,164,166	105,959,031	18,801,857	4,403,278
1962	222,689,941	207,040,920	14,487,847	1,161,174	135,909,089	110,492,248	20,484,581	4,932,260
1963	227,375,671	209,369,531	16,495,342	1,510,798	158,283,328	129,781,571	24,455,139	4,046,618
1964	248,585,715	224,433,206	22,118,397	2,034,112	173,339,418	142,874,452	24,866,892	5,598,074
1965	269,834,819	244,874,087	21,059,701	3,901,031	173,891,990	142,121,011	25,692,770	6,078,209
1966	283,847,300	257,173,478	22,585,271	4,088,551	187,543,783	155,759,371	24,905,662	6,878,750
1967	275,965,191	248,245,275	23,269,404	4,450,512	190,007,047	162,443,124	21,896,595	5,667,328
1968	310,936,331	278,826,933	25,658,847	6,450,551	197,013,671	166,579,691	24,444,154	5,989,826
1969	320,293,084	295,647,991	19,770,247	4,874,846	201,019,278	168,944,254	25,235,730	6,839,294
1970	339,339,772	312,933,583	21,820,193	4,585,996	241,629,361	205,697,712	29,146,465	6,785,184
1971	359,745,840	333,776,713	19,104,708	6,864,419	206,239,744	172,758,807	24,757,317	8,723,620
1972	397,565,612	372,417,770	18,861,084	6,286,758	232,415,232	197,430,445	25,352,496	9,632,291
1973	490,088,015	461,828,145	22,988,904	5,270,966	277,305,888	238,807,467	28,435,708	10,062,713
1974	497,282,811	473,940,012	19,027,376	4,315,423	266,806,094	238,686,754	23,342,970	4,776,370
1975	476,572,426	455,117,218	18,121,866	3,333,342	272,134,891	236,707,996	28,707,321	6,719,574
1976	570,318,893	539,674,048	25,845,506	4,799,339	285,645,016	250,632,668	28,050,680	6,961,668
1977	658,136,893	625,308,679	25,416,264	7,411,950	277,119,920	240,784,157	27,741,857	8,593,906
1978	643,186,863	616,140,827	19,916,819	7,129,217	302,871,026	259,316,657	30,961,456	12,592,913
1979	632,995,657	607,898,526	19,450,918	5,646,213	360,449,306	311,786,293	37,964,841	10,698,172
1980	517,521,121	502,005,866	13,414,205	2,101,050	403,882,879	358,805,981	37,216,588	7,860,310
1981	477,191,504	457,467,479	16,794,705	2,929,320	409,910,646	366,424,418	36,976,771	6,509,457
1982	416,621,434	402,511,218	11,541,473	2,568,743	403,109,549	366,825,117	29,701,691	6,582,741
1983	387,847,325	371,773,135	13,080,460	2,993,730	363,292,869	330,955,677	26,794,890	5,542,302
1984	427,139,571	409,295,162	12,922,699	4,921,710	376,198,562	335,269,229	32,286,050	8,643,283
1985	412,687,350	395,577,007	11,916,969	5,193,374	361,635,933	327,425,824	27,727,141	6,482,968
1986	486,073,464	472,230,980	9,597,544	4,244,940	351,150,039	319,163,161	25,248,144	6,738,734
1987	507,704,274	493,828,182	10,040,313	3,835,779	383,275,771	351,226,492	26,766,116	5,283,163
1988	549,897,111	534,043,106	11,720,685	4,133,320	426,323,874	389,686,249	31,651,401	4,986,224
1989	589,504,121	571,732,624	13,535,132	4,236,365	448,406,092	411,338,444	31,936,141	5,131,507
1990	599,969,567	582,411,718	14,534,942	3,022,907	441,586,173	408,688,047	29,561,192	3,336,934
1991	555,354,134	541,066,623	12,078,748	2,208,763	458,202,902	430,654,747	25,178,669	2,369,486
1992	586,708,302	571,286,921	11,965,503	3,455,878	450,757,828	420,666,674	27,978,689	2,112,465
1993	648,783,131	630,700,438	13,680,579	4,402,114	411,258,086	385,697,690	22,914,344	2,646,052
1994	719,497,159	696,468,970	17,045,105	5,983,084	396,245,669	369,138,035	23,844,491	3,263,143
1995	672,657,412	653,760,004	15,635,613	3,261,795	474,700,370	441,732,416	29,182,948	3,785,006
1996	732,592,335	708,089,695	19,081,763	5,420,877	450,794,286	418,939,647	28,335,088	3,519,551
<b>1997</b>	<b>788,302,568</b>	<b>763,770,891</b>	<b>19,984,130</b>	<b>4,547,547</b>	<b>432,312,564</b>	<b>399,103,578</b>	<b>29,718,807</b>	<b>3,490,179</b>

\*Includes tonnage for Department of Defense controlled cargo and special category commodities for which breakdown by Canadian and Overseas traffic was:

1958 - 21,457 tons; 1959 - 21,584 tons;

Table 1-3: DOMESTIC WATERBORNE COMMERCE OF THE U.S., 1958-1997  
(in short tons of 2000 pounds)

Year	Total	Coastwise	Lakewise	Internal	Intraport	Intra-territory
1958	695,664,978	194,050,174	132,288,549	261,068,849	105,424,974	2,832,432
1959	726,732,163	205,509,011	131,220,380	282,268,792	106,746,596	** 987,384
1960	760,573,156	209,196,823	155,109,237	291,056,655	104,193,446	1,016,995
1961	732,825,364	206,899,377	136,841,146	294,052,123	93,929,070	1,103,648
1962	770,805,345	215,460,882	135,743,781	316,061,877	102,277,229	1,261,576
1963	788,107,965	213,853,293	141,741,152	331,902,484	98,980,624	1,630,412
1964	816,168,440	205,687,985	151,404,618	357,916,216	99,579,422	1,580,199
1965	829,169,434	201,508,107	153,695,242	369,615,461	102,865,022	1,485,602
1966	862,724,995	208,374,966	164,036,995	389,851,631	99,214,579	1,246,824
1967	870,633,840	214,646,527	153,596,684	398,592,679	102,320,054	1,477,896
1968	887,889,448	214,250,535	151,115,936	430,174,303	90,730,336	1,618,338
1969	927,399,179	216,707,773	160,843,835	460,944,875	87,536,483	1,366,213
1970	950,727,374	238,440,385	157,058,867	472,123,417	81,474,805	1,629,900
1971	946,598,106	242,916,056	140,954,956	479,217,765	81,252,652	2,256,677
1972	986,811,761	242,660,087	145,013,420	506,989,242	90,266,095	1,882,917
1973	994,158,107	236,794,660	156,620,831	503,236,890	93,222,623	4,283,103
1974	982,699,639	233,358,124	146,067,270	511,021,978	88,197,576	4,054,691
1975	946,326,959	231,932,437	129,331,161	503,932,258	78,279,224	2,851,879
1976	979,042,910	236,278,624	132,112,775	523,972,573	83,731,092	2,947,846
1977	972,966,806	248,083,336	109,079,945	528,704,658	83,444,472	3,654,395
1978	1,075,291,865	305,342,824	142,662,552	534,508,943	89,506,584	3,270,962
1979	1,080,312,665	304,665,522	143,563,644	534,969,167	93,113,665	4,000,667
1980	1,077,483,402	329,608,613	115,124,231	534,979,027	94,183,696	3,587,835
1981	1,054,456,797	321,989,988	115,418,165	520,668,720	93,249,873	3,130,051
1982	957,009,596	311,058,264	72,084,986	495,453,486	75,601,691	2,811,169
1983	956,520,817	309,636,759	83,446,847	487,132,248	73,144,961	3,160,002
1984	1,032,682,486	307,652,127	98,010,499	542,502,695	81,110,880	3,406,285
1985	1,014,111,539	309,801,605	91,987,003	534,658,233	74,263,246	3,401,452
1986	1,037,192,777	308,024,669	87,352,525	560,499,024	77,357,617	3,958,942
1987	1,076,478,216	323,518,318	96,483,652	569,826,970	81,951,080	4,698,196
1988	1,111,772,499	325,176,859	109,664,111	588,118,666	83,689,494	5,123,369
1989	1,102,532,159	302,026,859	109,086,425	606,005,956	80,207,745	5,205,174
1990	1,122,298,633	298,636,988	110,159,406	622,595,330	86,377,845	4,529,064
1991	1,078,551,426	294,542,786	103,426,933	600,386,004	75,634,960	4,558,743
1992	1,094,629,024	285,130,765	107,398,037	621,037,417	76,817,429	4,245,376
1993	1,068,179,971	271,717,424	109,853,847	607,253,349	74,390,472	4,964,879
1994	1,099,011,258	277,029,286	114,777,289	618,408,708	82,870,326	5,925,649
1995	1,093,035,277	266,612,137	116,126,515	620,324,217	83,104,283	6,868,125
1996	1,100,678,628	267,388,864	114,870,355	*622,081,474	*89,010,522	7,327,413
<b>1997</b>	<b>1,112,526,914</b>	<b>263,145,835</b>	<b>122,734,048</b>	<b>630,558,223</b>	<b>89,816,062</b>	<b>6,272,746</b>

\* Beginning in 1996, fish was excluded.

\*\* Beginning in 1959, excludes traffic within the states of Alaska and Hawaii. Such traffic is included in other domestic traffic categories in accordance with definitions applicable to continental United States.

**Table 1-4: TOTAL WATERBORNE COMMERCE, 1978-1997**  
**TON-MILES, SHORT TONS AND AVERAGE HAUL BY TYPE OF TRAFFIC**

Year	Grand Total	Foreign			Domestic				
		Total	Great Lakes Ports	Coastal Ports	Total	Coastwise	Lakewise	Internal	Intraport
<b>Ton-Miles*** (millions)</b>									
1978	928,297.7	101,034.4	*42,108.8	**58,925.6	827,263.3	540,373.2	76,284.0	209,266.2	1,339.8
1979	931,846.4	103,086.9	*43,146.4	**59,940.5	828,759.5	532,290.3	77,968.8	217,090.2	1,410.2
1980	1,016,085.2	94,249.4	*33,679.6	**60,569.8	921,835.8	631,149.2	61,747.1	227,343.0	1,596.4
1981	1,023,636.5	94,223.1	*35,294.0	**58,929.2	929,413.4	634,765.3	62,148.4	231,184.1	1,315.6
1982	964,896.9	78,428.2	*27,165.5	**51,262.7	886,468.7	632,707.1	35,623.3	217,026.7	1,111.7
1983	989,161.6	69,596.0	*24,309.4	**45,286.7	919,565.6	649,749.5	43,088.2	225,628.3	1,099.7
1984	966,478.2	78,758.2	*32,249.4	**46,508.8	887,720.0	593,923.1	49,784.4	242,855.4	1,157.1
1985	964,911.2	71,941.2	*27,171.8	**44,769.4	892,970.0	610,976.5	48,184.0	232,707.5	1,102.0
1986	944,910.5	71,509.4	*24,235.3	**47,274.2	873,401.0	580,888.7	43,198.2	248,116.9	1,197.3
1987	968,403.7	72,988.2	*22,003.3	**50,985.0	895,415.5	586,818.4	50,076.7	257,336.4	1,183.9
1988	970,685.0	80,656.6	*24,448.4	**56,208.2	890,028.4	561,594.9	58,159.5	269,035.7	1,238.4
1989	911,232.2	95,682.3	*27,118.9	**68,563.4	815,549.9	483,888.6	58,307.6	272,157.4	1,196.3
1990	+932,151.4	+98,607.6	*24,330.8	**+74,276.9	833,543.8	479,133.6	60,929.9	292,393.3	1,087.0
1991	+938,671.3	+90,272.3	*17,102.6	**+73,169.7	848,399.0	502,133.0	55,339.1	289,959.0	968.0
1992	+949,344.7	+92,660.1	*21,027.6	**+71,632.5	856,684.6	502,311.0	55,784.6	297,638.7	950.3
1993	+882,605.8	+92,947.9	*26,106.8	**+66,841.1	789,657.9	448,404.2	56,438.1	283,893.6	921.9
1994	909,405.0	94,485.8	*28,299.6	**66,186.2	814,919.2	457,600.7	58,263.4	297,762.4	1,292.7
1995	914,362.5	106,634.9	*31,656.5	**74,978.4	807,727.7	440,345.1	59,703.8	306,329.1	1,349.6
1996	870,193.4	105,506.9	*34,259.9	**71,247.0	764,686.5	408,086.1	58,335.3	296,790.6	1,474.5
<b>1997</b>	<b>813,800.1</b>	<b>106,390.2</b>	<b>*32,535.9</b>	<b>**73,854.3</b>	<b>707,409.9</b>	<b>349,843.0</b>	<b>62,165.9</b>	<b>294,023.0</b>	<b>1,378.1</b>
<b>Tons*** (millions)</b>									
1978	2,018.1	946.1	70.6	875.5	1,072.0	305.3	142.7	534.5	89.5
1979	2,069.8	993.4	73.8	919.7	1,076.3	304.7	143.6	535.0	93.1
1980	1,995.3	921.4	60.6	860.8	1,073.9	329.6	115.1	535.0	94.2
1981	1,938.4	887.1	63.2	823.9	1,051.3	322.0	115.4	520.7	93.2
1982	1,773.9	819.7	50.4	769.3	954.2	311.1	72.1	495.5	75.6
1983	1,704.5	751.1	48.4	702.7	953.4	309.6	83.4	487.1	73.1
1984	1,832.6	803.3	58.8	744.6	1,029.3	307.7	98.0	542.5	81.1
1985	1,785.0	774.3	51.3	723.0	1,010.7	309.8	92.0	534.7	74.3
1986	1,870.5	837.2	45.8	791.4	1,033.2	308.0	87.4	560.5	77.4
1987	1,962.8	891.0	45.9	845.1	1,071.8	323.5	96.5	569.8	82.0
1988	2,082.9	976.2	52.5	923.7	1,106.6	325.2	109.7	588.1	83.7
1989	2,135.2	1,037.9	54.8	983.1	1,097.3	302.0	109.1	606.0	80.2
1990	2,159.3	1,041.6	50.5	991.1	1,117.8	298.6	110.2	622.5	86.4
1991	2,087.6	1,013.6	41.8	971.8	1,074.0	294.5	103.4	600.4	75.6
1992	2,127.9	1,037.5	45.5	992.0	1,090.4	285.1	107.4	621.0	76.8
1993	2,123.3	1,060.0	43.6	1,016.4	1,063.2	271.7	109.8	607.3	74.4
1994	2,208.8	1,115.7	50.1	1,065.6	1,093.1	277.0	114.8	618.4	82.9
1995	2,233.5	1,147.4	51.9	1,095.5	1,086.2	266.6	116.1	620.3	83.1
1996	2,276.7	1,183.4	56.4	1,127.0	1,093.4	267.4	114.9	++622.1	++89.0
<b>1997</b>	<b>2,326.9</b>	<b>1,220.6</b>	<b>57.7</b>	<b>1,162.9</b>	<b>1,106.3</b>	<b>263.1</b>	<b>122.7</b>	<b>630.6</b>	<b>89.8</b>

Based on distance transported on Great Lakes and St. Lawrence River to International Boundary at St. Regis, Quebec, Canada

Based on distance transported on United States Waterways from entrance channels to ports and waterways. Excludes intra-territory traffic for which ton-miles were not compiled.

An error in the routing network caused the coastal port foreign ton-mile totals to be slightly inflated for calendar years 1990-1993. The corrections are reflected in these revised totals. Ton-miles for individual ports were not affected.

Beginning in 1996, fish was excluded.

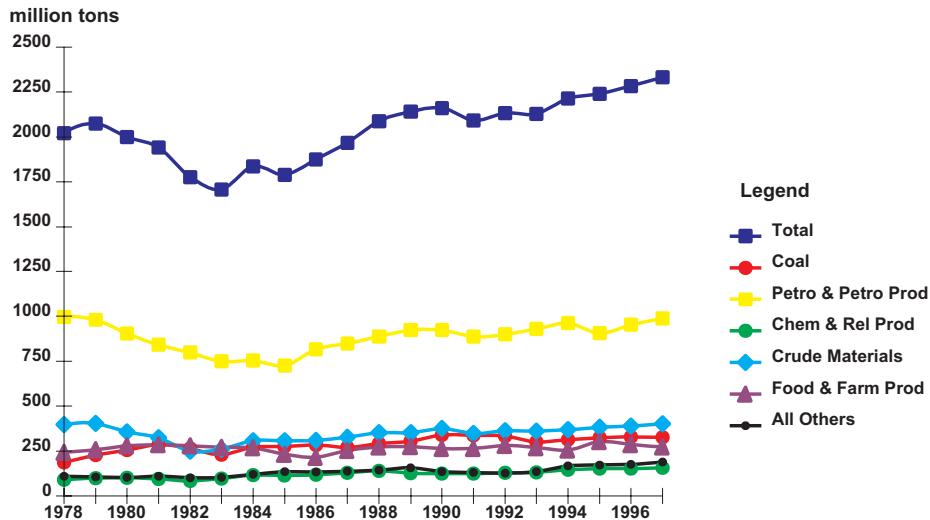
**Table 1-4: TOTAL WATERBORNE COMMERCE, 1978-1997**  
**TON-MILES, SHORT TONS AND AVERAGE HAUL BY TYPE OF TRAFFIC**  
(continued)

Year	Grand Total	Foreign			Domestic				
		Total	Great Lakes Ports	Coastal Ports	Total	Coastwise	Lakewise	Internal	Intraport
<b>Average Haul*** (miles)</b>									
1978	459.9	106.8	596.4	67.3	771.6	1,769.7	534.7	391.5	14.9
1979	450.2	103.8	585.0	65.2	770.0	1,747.1	543.1	405.8	15.1
1980	509.2	102.3	555.8	70.4	858.4	1,914.8	536.4	405.0	16.9
1981	528.1	106.2	558.4	71.5	884.0	1,971.4	538.5	444.0	14.1
1982	543.9	95.7	539.1	66.6	929.0	2,034.0	494.2	438.0	14.7
1983	580.3	92.7	502.1	64.4	964.6	2,098.4	516.4	463.2	15.0
1984	527.4	98.4	548.7	62.5	862.5	1,930.5	508.0	448.0	14.3
1985	540.5	92.9	529.5	61.9	883.5	1,972.2	523.8	435.2	14.8
1986	505.2	85.4	528.8	59.7	845.3	1,885.9	494.5	442.7	15.5
1987	493.3	81.9	479.1	60.3	835.4	1,813.9	519.0	451.6	14.4
1988	464.9	82.6	465.8	60.8	804.3	1,727.0	530.3	457.5	14.8
1989	426.8	92.3	494.5	69.7	743.2	1,602.1	534.5	449.1	14.9
1990	+431.7	+94.7	482.2	+74.9	745.7	1,604.4	553.1	469.7	12.6
1991	+449.6	+89.1	409.2	+75.3	789.9	1,704.8	535.0	483.0	12.8
1992	+446.1	+89.3	462.2	+72.2	785.7	1,761.7	519.4	479.3	12.4
1993	+415.7	+87.7	598.2	+65.8	742.7	1,650.3	513.8	467.5	12.4
1994	411.7	84.7	564.5	62.1	745.5	1,651.8	507.6	481.5	15.6
1995	409.4	92.9	610.4	68.4	743.6	1,651.6	514.1	493.8	16.2
1996	382.2	89.2	607.9	63.2	699.4	1,526.2	507.8	477.1	16.6
<b>1997</b>	<b>349.7</b>	<b>87.2</b>	<b>563.5</b>	<b>63.5</b>	<b>639.5</b>	<b>1,329.5</b>	<b>506.5</b>	<b>466.3</b>	<b>15.3</b>

An error in the routing network caused the coastal port foreign ton-mile totals to be slightly inflated for calendar years 1990-1993. The corrections are reflected in these revised totals. Ton-miles for individual ports were not affected.

Excludes intra-territory traffic for which ton-miles were not compiled.

*Figure 1-3*  
 TOTAL WATERBORNE COMMERCE, 1978-1997  
 BY COMMODITY GROUP  
 (million short tons)

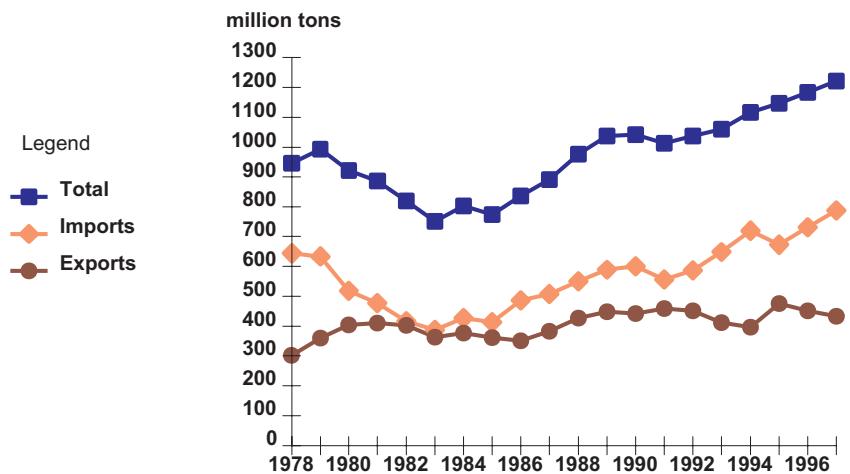


*Table 1-5: TOTAL WATERBORNE COMMERCE, 1978-1997*  
 BY COMMODITY GROUP  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>2,021.3</b>	<b>2,073.8</b>	<b>1,998.9</b>	<b>1,941.6</b>	<b>1,776.7</b>	<b>1,707.7</b>	<b>1,836.0</b>	<b>1,788.4</b>	<b>1,874.4</b>	<b>1,967.5</b>
Coal	185.9	227.4	256.4	284.6	263.1	229.8	271.8	273.9	283.9	271.3
Petro & Petro Prod	997.0	980.8	903.2	842.4	799.6	748.5	753.5	726.4	815.6	847.7
Chem & Rel Prod	89.3	99.4	101.3	94.8	84.7	96.7	115.1	114.3	118.6	129.0
Crude Materials	396.5	403.5	356.9	325.2	249.2	260.0	307.1	307.1	308.4	327.1
Primary Manuf Goods	65.6	64.0	58.5	61.2	51.3	56.4	69.3	76.9	76.0	76.5
Food & Farm Prod	242.5	257.0	278.3	285.6	279.9	270.3	268.3	231.0	215.2	254.1
All Manuf Equip	23.5	22.7	23.6	23.7	21.2	23.9	25.1	29.8	31.4	33.6
Other	21.1	18.9	20.7	24.0	27.7	22.1	25.8	29.1	25.5	28.2
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>2,088.0</b>	<b>2,140.4</b>	<b>2,163.9</b>	<b>2,092.1</b>	<b>2,132.1</b>	<b>2,128.2</b>	<b>2,214.8</b>	<b>2,240.4</b>	<b>2,284.1</b>	<b>2,333.1</b>
Coal	292.2	304.8	339.9	336.8	332.2	300.4	314.1	324.5	328.7	326.0
Petro & Petro Prod	887.7	922.7	923.5	886.0	899.6	930.6	961.3	907.1	954.4	988.2
Chem & Rel Prod	138.8	127.8	123.8	125.1	128.7	131.6	146.9	152.9	152.3	156.6
Crude Materials	352.0	353.2	374.9	348.9	364.0	360.6	369.3	381.7	388.7	400.9
Primary Manuf Goods	79.5	77.8	76.0	71.8	70.1	76.8	105.0	106.3	108.9	117.0
Food & Farm Prod	273.4	276.0	267.5	263.9	280.4	269.3	225.8	303.2	*284.9	271.7
All Manuf Equip	33.8	38.4	42.2	43.6	49.0	51.1	54.9	57.8	59.0	66.1
Other	30.5	39.7	16.5	16.0	8.0	7.9	7.3	6.9	7.2	6.6

\* Beginning in 1996, fish was excluded for internal and intraport domestic traffic.

*Figure 1-4*  
 FOREIGN WATERBORNE COMMERCE, 1978-1997  
 IMPORTS AND EXPORTS  
 (million short tons)

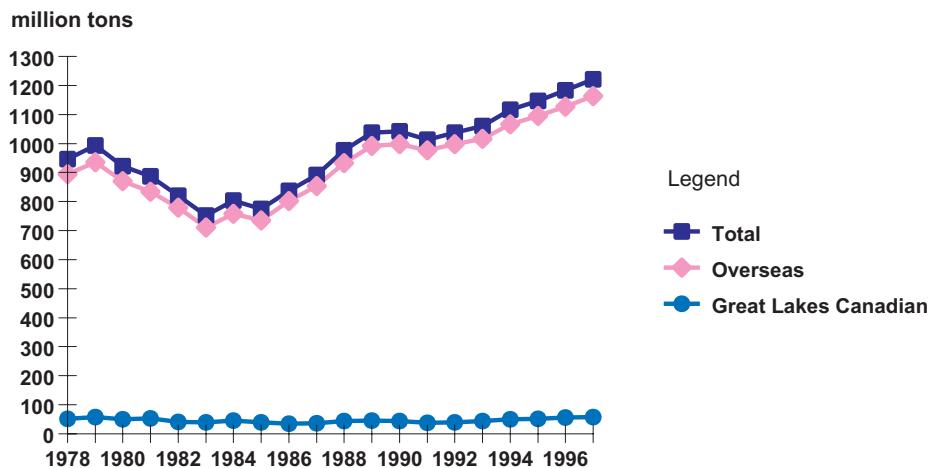


*Table 1-6: FOREIGN WATERBORNE COMMERCE, 1978-1997*  
 IMPORTS AND EXPORTS  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>946.1</b>	<b>993.4</b>	<b>921.4</b>	<b>887.1</b>	<b>819.7</b>	<b>751.1</b>	<b>803.3</b>	<b>774.3</b>	<b>837.2</b>	<b>891.0</b>
Imports	643.2	633.0	517.5	477.2	416.6	387.8	427.1	412.7	486.1	507.7
Exports	302.9	360.4	403.9	409.9	403.1	363.3	376.2	361.6	351.2	383.3

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>976.2</b>	<b>1,037.9</b>	<b>1,041.6</b>	<b>1,013.6</b>	<b>1,037.5</b>	<b>1,060.0</b>	<b>1,115.7</b>	<b>1,147.4</b>	<b>1,183.4</b>	<b>1,220.6</b>
Imports	549.9	589.5	600.0	555.4	586.7	648.8	719.5	672.7	732.6	788.3
Exports	426.3	448.4	441.6	458.2	450.8	411.3	396.2	474.7	450.8	432.3

*Figure 1-5*  
 FOREIGN WATERBORNE COMMERCE, 1978-1997  
 TOTAL, OVERSEAS AND GREAT LAKES CANADIAN TRAFFIC  
 (million short tons)

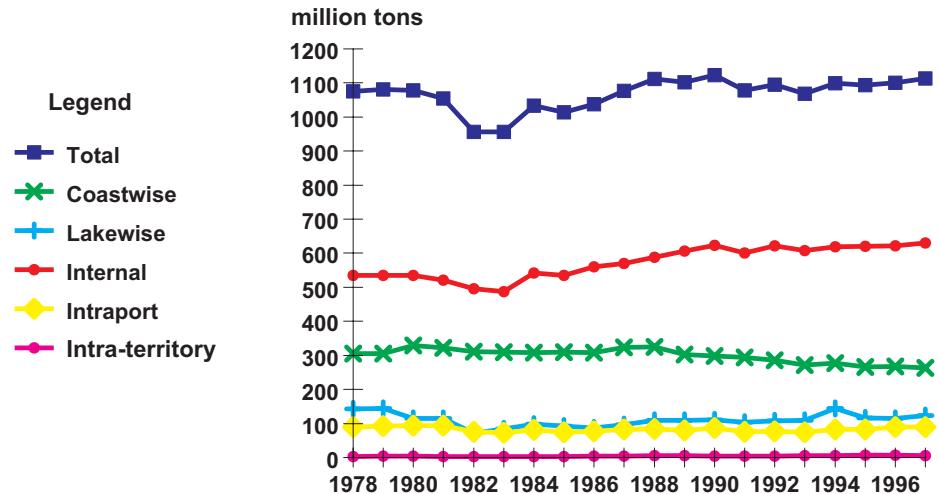


*Table 1-7: FOREIGN WATERBORNE COMMERCE, 1978-1997*  
 TOTAL, OVERSEAS AND GREAT LAKES CANADIAN TRAFFIC  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>946.1</b>	<b>993.4</b>	<b>921.4</b>	<b>887.1</b>	<b>819.7</b>	<b>751.1</b>	<b>803.3</b>	<b>774.3</b>	<b>837.2</b>	<b>891.0</b>
Overseas	895.2	936.0	870.8	833.3	778.5	711.3	758.1	734.7	802.4	854.2
Great Lakes Canadian	50.9	57.4	50.6	53.8	41.2	39.9	45.2	39.6	34.8	36.8

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>976.2</b>	<b>1,037.9</b>	<b>1,041.6</b>	<b>1,013.6</b>	<b>1,037.5</b>	<b>1,060.0</b>	<b>1,115.7</b>	<b>1,147.4</b>	<b>1,183.4</b>	<b>1,220.6</b>
Overseas	932.8	992.4	997.5	976.3	997.5	1,016.4	1,065.6	1,095.5	1,127.0	1,162.9
Great Lakes Canadian	43.4	45.5	44.1	37.3	39.9	43.6	50.1	51.9	56.4	57.7

*Figure 1-6*  
 DOMESTIC WATERBORNE COMMERCE,  
 1978-1997  
 BY TYPE OF TRAFFIC  
 (million short tons)



*Table 1-8: DOMESTIC WATERBORNE COMMERCE, 1978-1997*  
 BY TYPE OF TRAFFIC  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>1,075.3</b>	<b>1,080.3</b>	<b>1,077.5</b>	<b>1,054.5</b>	<b>957.0</b>	<b>956.5</b>	<b>1,032.7</b>	<b>1,014.1</b>	<b>1,037.2</b>	<b>1,076.5</b>
Coastwise	305.3	304.7	329.6	322.0	311.1	309.6	307.7	309.8	308.0	323.5
Lakewise	142.7	143.6	115.1	115.4	72.1	83.4	98.0	92.0	87.4	96.5
Internal	534.5	535.0	535.0	520.7	495.5	487.1	542.5	534.7	560.5	569.8
Intraport	89.5	93.1	94.2	93.2	75.6	73.1	81.1	74.3	77.4	82.0
Intra-territory	3.3	4.0	3.6	3.1	2.8	3.2	3.4	3.4	4.0	4.7

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>1,111.8</b>	<b>1,102.5</b>	<b>1,122.3</b>	<b>1,078.6</b>	<b>1,094.6</b>	<b>1,068.2</b>	<b>1,099.0</b>	<b>1,093.0</b>	<b>1,100.7</b>	<b>1,112.5</b>
Coastwise	325.2	302.0	298.6	294.5	285.1	271.7	277.0	266.6	267.4	263.1
Lakewise	109.7	109.1	110.2	103.4	107.4	109.9	114.8	116.1	114.9	122.7
Internal	588.1	606.0	622.6	600.4	621.0	607.3	618.4	620.3	*622.1	630.6
Intraport	83.7	80.2	86.4	75.6	76.8	74.4	82.9	83.1	*89.0	89.8
Intra-territory	5.1	5.2	4.5	4.6	4.2	5.0	5.9	6.9	7.3	6.3

\* Beginning in 1996, fish was excluded.

*Figure 1-7*  
 DOMESTIC WATERBORNE COMMERCE, 1978-1997  
 TON-MILES BY TYPE OF TRAFFIC  
 (billion short ton-miles)

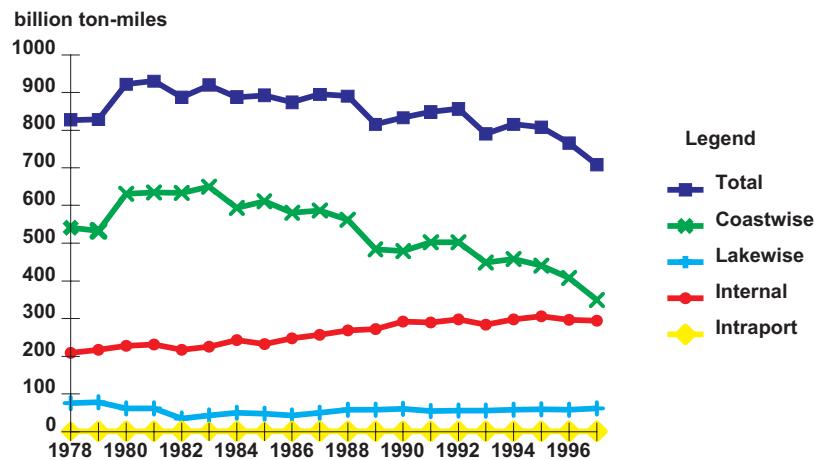


Table 1-9: DOMESTIC WATERBORNE COMMERCE, 1978-1997  
 TON-MILES BY TYPE OF TRAFFIC  
 (billion short ton-miles)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>827.3</b>	<b>828.8</b>	<b>921.8</b>	<b>929.4</b>	<b>886.5</b>	<b>919.6</b>	<b>887.7</b>	<b>893.0</b>	<b>873.4</b>	<b>895.4</b>
Coastwise	540.4	532.3	631.1	634.8	632.7	649.7	593.9	611.0	580.9	586.8
Lakewise	76.3	78.0	61.7	62.1	35.6	43.1	49.8	48.2	43.2	50.1
Internal	209.3	217.1	227.3	231.2	217.0	225.6	242.9	232.7	248.1	257.3
Intraport	1.3	1.4	1.6	1.3	1.1	1.1	1.2	1.1	1.2	1.2

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>890.0</b>	<b>815.5</b>	<b>833.5</b>	<b>848.4</b>	<b>856.7</b>	<b>789.7</b>	<b>814.9</b>	<b>807.7</b>	<b>764.7</b>	<b>707.4</b>
Coastwise	561.6	483.9	479.1	502.1	502.3	448.4	457.6	440.3	408.1	349.8
Lakewise	58.2	58.3	60.9	55.3	55.8	56.4	58.3	59.7	58.3	62.2
Internal	269.0	272.2	292.4	290.0	297.6	283.9	297.8	306.3	296.8	294.0
Intraport	1.2	1.2	1.1	1.0	1.0	0.9	1.3	1.3	1.5	1.4

*Figure 1-8*  
**DOMESTIC WATERBORNE COMMERCE, 1978-1997**  
**AVERAGE HAUL BY TYPE OF TRAFFIC**  
(miles per short ton)

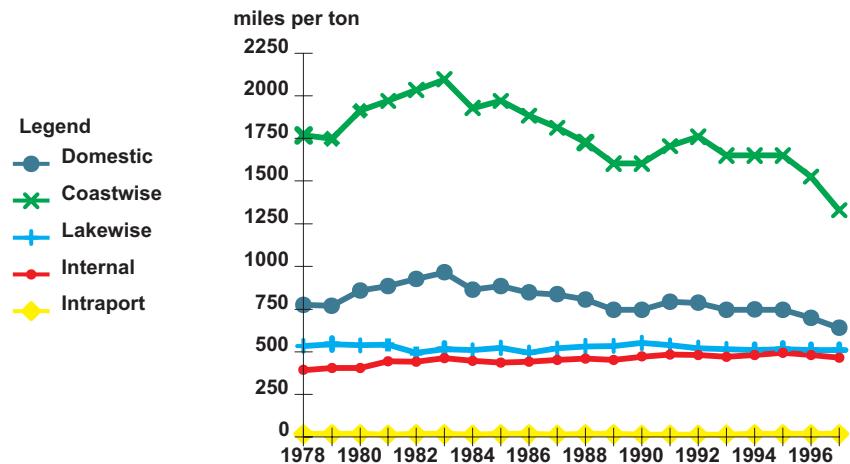


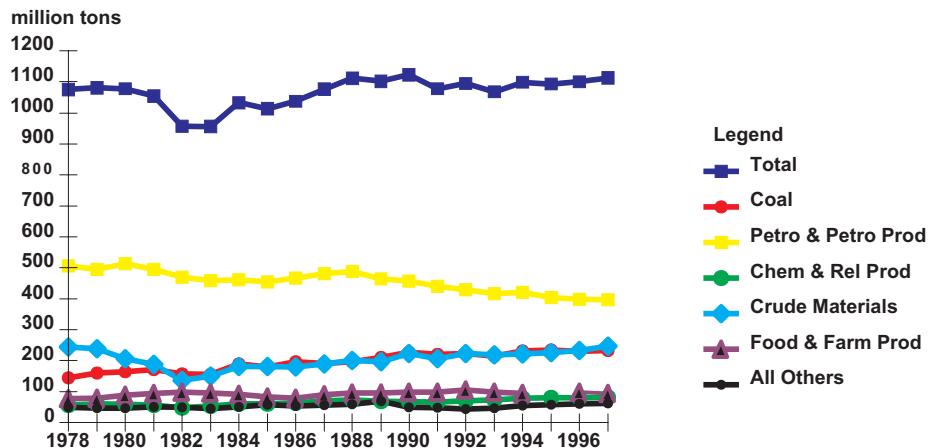
Table 1-10: DOMESTIC WATERBORNE COMMERCE, 1978-1997  
**AVERAGE HAUL BY TYPE OF TRAFFIC**  
(miles per short ton)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Domestic	771.6	770.0	858.4	884.0	929.0	964.6	862.5	883.5	845.3	835.4
Coastwise	1,769.7	1,747.1	1,914.8	1,971.4	2,034.0	2,098.4	1,930.5	1,972.2	1,885.9	1,813.9
Lakewise	534.7	543.1	536.4	538.5	494.2	516.4	508.0	523.8	494.5	519.0
Internal	391.5	405.8	405.0	444.0	438.0	463.2	448.0	435.2	442.7	451.6
Intraport	14.9	15.1	16.9	14.1	14.7	15.0	14.3	14.8	15.5	14.4

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Domestic	804.3	743.2	745.7	789.9	785.7	742.7	745.5	743.6	699.4	639.5
Coastwise	1,727.0	1,602.1	1,604.4	1,704.8	1,761.7	1,650.4	1,651.8	1,651.6	1,526.2	1,329.5
Lakewise	530.3	534.5	553.1	535.0	519.4	514.0	507.6	514.1	507.8	506.5
Internal	457.5	449.1	469.6	483.0	479.3	467.5	481.5	493.8	477.1	466.3
Intraport	14.8	14.9	12.6	12.8	12.4	12.4	15.6	16.2	16.6	15.3

*Figure 1-9*  
 DOMESTIC WATERBORNE COMMERCE, 1978-1997  
 BY COMMODITY GROUP  
 (million short tons)



*Table 1-11: DOMESTIC WATERBORNE COMMERCE, 1978-1997*  
 BY COMMODITY GROUP  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>1,075.3</b>	<b>1,080.3</b>	<b>1,077.5</b>	<b>1,054.5</b>	<b>957.0</b>	<b>956.5</b>	<b>1,032.7</b>	<b>1,014.1</b>	<b>1,037.2</b>	<b>1,076.5</b>
Coal	143.8	160.5	164.1	171.5	156.5	155.5	189.5	179.8	196.7	190.6
Petro & Petro Prod	506.2	495.4	513.4	495.2	469.2	458.0	460.6	453.5	466.8	480.3
Chem & Rel Prod	55.9	60.6	59.5	56.3	47.5	52.8	60.1	59.7	63.7	70.3
Crude Materials	243.6	238.8	205.4	187.4	136.3	149.9	180.5	181.4	179.5	189.2
Primary Manuf Goods	23.8	24.1	22.4	23.4	18.8	20.1	22.9	25.2	24.8	24.3
Food & Farm Prod	76.5	78.5	88.7	93.3	98.3	95.9	91.2	82.1	77.8	90.2
All Manuf Equip	5.3	4.3	4.3	4.1	3.4	3.0	3.1	4.3	3.4	4.4
Other	25.6	22.5	24.1	23.2	27.0	21.3	24.9	28.1	24.5	27.1

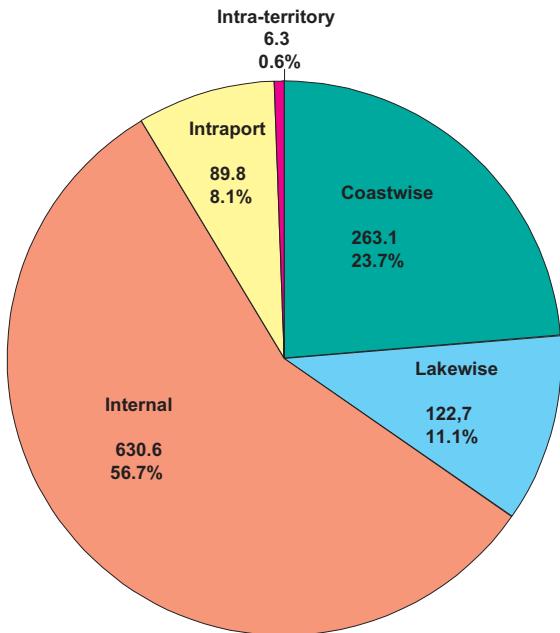
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>1,111.8</b>	<b>1,102.5</b>	<b>1,122.3</b>	<b>1,078.6</b>	<b>1,094.6</b>	<b>1,068.2</b>	<b>1,099.0</b>	<b>1,093.0</b>	<b>1,100.7</b>	<b>1,112.5</b>
Coal	196.8	210.9	227.1	219.8	223.5	214.7	231.3	223.5	229.9	232.3
Petro & Petro Prod	487.2	463.5	457.7	440.7	429.4	416.9	420.8	403.6	398.5	396.7
Chem & Rel Prod	73.3	68.6	67.4	65.4	70.1	72.8	78.5	79.4	80.2	81.0
Crude Materials	200.5	196.2	222.4	206.7	223.0	218.6	220.9	226.4	233.2	246.5
Primary Manuf Goods	24.6	24.9	25.5	25.4	25.8	28.5	35.7	36.8	37.7	37.2
Food & Farm Prod	95.3	94.7	98.6	98.2	105.3	98.3	93.3	103.4	*98.0	93.7
All Manuf Equip	5.3	5.3	8.1	8.1	10.6	11.6	12.5	14.6	17.2	19.5
Other	28.9	38.4	15.5	14.4	6.9	6.8	5.8	5.5	6.0	5.6

**Table 1-12: DOMESTIC COMMERCE, 1996-1997  
COMPARED BY TYPE OF TRAFFIC  
BARGE AND SELF-PROPELLED VESSELS  
(million short tons)**

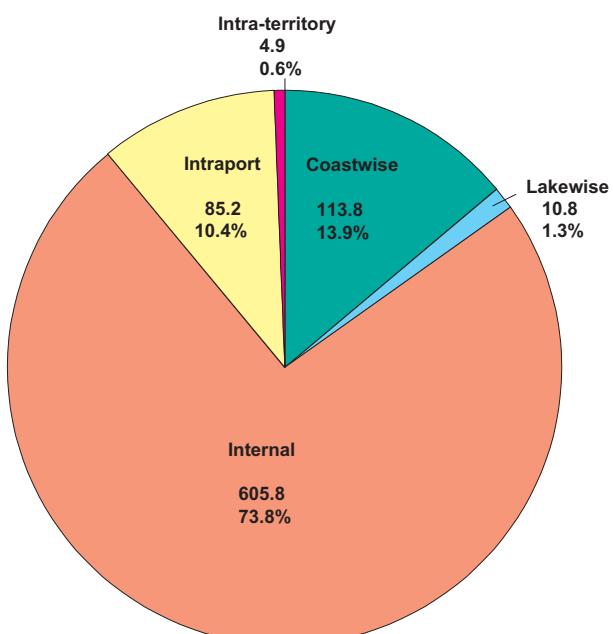
	1996	1997	% Change
<b>Domestic Traffic</b>	<b>1,100.7</b>	<b>1,112.5</b>	<b>1.1</b>
Coastwise	267.4	263.1	-1.6
Lakewise	114.9	122.7	6.8
Internal	622.1	630.6	1.4
Intraport	89.0	89.8	0.9
Intra-territory	7.3	6.3	-14.4
 <b>Barge Traffic</b>	 <b>802.3</b>	 <b>820.4</b>	 <b>2.3</b>
Coastwise	106.6	113.8	6.7
Lakewise	8.6	10.8	24.8
Internal	595.1	605.8	1.8
Intraport	86.0	85.2	-0.9
Intra-territory	6.0	4.9	-17.9
 <b>Self-Propelled Traffic</b>	 <b>298.4</b>	 <b>292.1</b>	 <b>-2.1</b>
Coastwise	160.8	149.4	-7.1
Lakewise	106.2	112.0	5.4
Internal	27.0	24.8	-8.3
Intraport	3.0	4.6	53.1
Intra-territory	1.4	1.4	1.1

*Figure 1-10*  
**DOMESTIC COMMERCE, 1997**  
 COMPARED BY TYPE OF TRAFFIC, BARGE AND SELF-PROPELLED VESSELS  
 (million short tons and percentage of short tons)

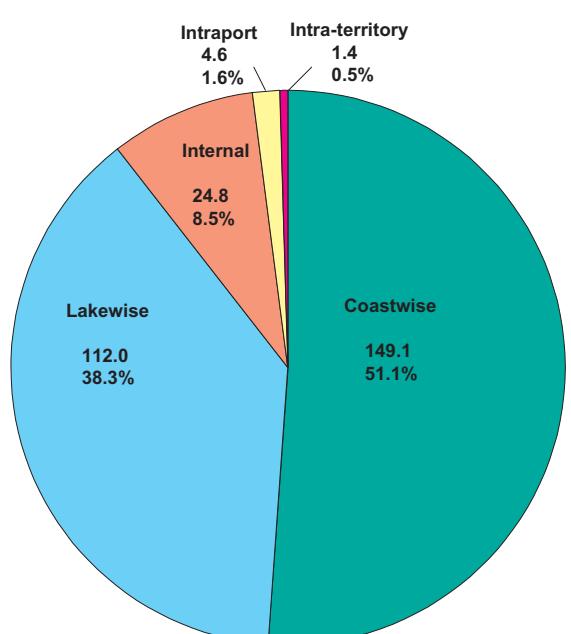
**Domestic Traffic**



**Barge Traffic**



**Self-Propelled Traffic**



**Table 1-13: WATERBORNE TRADE WITH NAFTA PARTNERS, 1997**  
 TONNAGE AND PERCENT OF TOTAL U.S. WATERBORNE IMPORTS AND EXPORTS  
 (short tons)

Commodity	Canada				Mexico			
	Imports from	%	Exports to	%	Imports from	%	Exports to	%
<b>Total, all commodities</b>	<b>63,230,670</b>	<b>8.0</b>	<b>37,336,003</b>	<b>8.6</b>	<b>95,766,960</b>	<b>12.1</b>	<b>16,709,577</b>	<b>3.9</b>
<b>Total coal</b>	<b>847,862</b>	<b>8.2</b>	<b>15,612,586</b>	<b>18.7</b>	—	—	<b>451,587</b>	<b>0.5</b>
1100 coal lignite	742,548	10.6	15,114,796	18.3	—	—	390,755	0.5
1200 coal coke	105,314	3.2	497,790	65.7	—	—	60,832	8.0
<b>Total petroleum and petroleum products</b>	<b>20,974,057</b>	<b>3.9</b>	<b>3,322,873</b>	<b>5.7</b>	<b>80,837,367</b>	<b>15.2</b>	<b>7,242,685</b>	<b>12.5</b>
<b>Subtotal crude petroleum</b>	<b>8,762,605</b>	<b>2.0</b>	<b>9,836</b>	<b>0.3</b>	<b>78,870,932</b>	<b>18.4</b>	—	—
2100 crude petroleum	8,762,605	2.0	9,836	0.3	78,870,932	18.4	—	—
<b>Subtotal petroleum products</b>	<b>12,211,452</b>	<b>11.7</b>	<b>3,313,037</b>	<b>6.1</b>	<b>1,966,435</b>	<b>1.9</b>	<b>7,242,685</b>	<b>13.3</b>
2211 gasoline	4,845,568	25.0	525,541	9.1	51	0.0	3,314,118	57.3
2221 kerosene	225,102	4.5	218,197	13.3	226,711	4.6	6,118	0.4
2330 distillate fuel oil	3,813,648	22.9	10,547	0.2	210,125	1.3	843,401	14.3
2340 residual fuel oil	1,743,340	6.0	1,141,718	13.4	67,652	0.2	2,205,957	25.9
2350 lube oil & greases	176,867	1.6	102,290	6.2	1,157	0.0	25,869	1.6
2410 petro. jelly & waxes	—	—	—	—	43	0.0	1,184	1.0
2429 naphtha & solvents	473,329	3.4	142,152	4.1	1,180,720	8.5	235,194	6.8
2430 asphalt, tar & pitch	124,054	21.2	189,439	4.8	31	0.0	233,347	5.9
2540 petroleum coke	800,798	19.9	983,153	4.6	231,517	5.8	54,933	0.3
2640 liquid natural gas	8,746	0.2	—	—	48,428	1.1	322,564	14.9
<b>Total chemicals and related products</b>	<b>3,341,586</b>	<b>13.3</b>	<b>1,018,778</b>	<b>2.0</b>	<b>1,203,820</b>	<b>4.8</b>	<b>2,405,265</b>	<b>4.8</b>
<b>Subtotal fertilizers</b>	<b>783,900</b>	<b>18.3</b>	<b>192,062</b>	<b>1.2</b>	<b>216,226</b>	<b>5.1</b>	<b>462,389</b>	<b>2.9</b>
3110 nitrogenous fert.	104,665	4.5	24,514	1.2	200,770	8.6	154,666	7.8
3120 phosphatic fert.	—	—	1,044	0.1	4,572	5.8	—	—
3130 potassic fert.	678,642	52.6	10,383	0.8	—	—	18,466	1.5
3190 fert. & mixes nec	593	0.1	156,121	1.3	10,884	1.9	289,257	2.4
<b>Subtotal other chemicals and related products</b>	<b>2,557,686</b>	<b>12.3</b>	<b>826,716</b>	<b>2.4</b>	<b>987,594</b>	<b>4.8</b>	<b>1,942,876</b>	<b>5.6</b>
3211 acyclic hydrocarbons	—	—	2,348	0.3	3,396	0.8	232,678	24.8
3212 benzene & toluene	142,216	48.6	77,266	23.8	—	—	44,859	13.8
3219 other hydrocarbons	338,034	38.9	7,779	0.2	1,019	0.1	689,496	15.4
3220 alcohols	551,508	15.4	950	0.0	88,639	2.5	197,408	7.0
3230 carboxylic acids	770	0.1	219	0.0	121,153	18.1	88,468	4.0
3240 nitrogen func. comp.	3,738	1.1	105	0.0	6,724	1.9	40,355	2.4
3250 organo-inorganic comp.	264	0.1	188	0.0	579	0.2	584	0.1
3260 organic comp. nec	627,973	15.5	413	0.0	55,271	1.4	416,735	30.6
3271 sulphur (liquid)	—	—	30	0.0	—	—	—	—
3272 sulphuric acid	394,695	49.4	—	—	264,439	33.1	2,723	8.9
3273 ammonia	250,082	7.4	—	—	319,424	9.4	—	—
3274 sodium hydroxide	71,672	12.0	605,332	20.5	14,744	2.5	96,535	3.3
3275 inorg. elem.,oxides, & halogen salts	23,451	3.1	45	0.0	12,943	1.7	28,268	2.5
3276 metallic salts	93,164	10.4	115,025	2.3	14,999	1.7	1,421	0.0
3279 inorganic chem. nec	60	0.0	—	—	84	0.0	1,359	2.8
3281 radioactive material	41	0.1	—	—	19	0.1	—	—
3282 pigments & paints	4,765	2.2	414	0.1	702	0.3	3,241	0.5
3283 coloring mat. nec	137	0.1	7	0.0	1,172	0.9	673	1.0
3284 medicines	519	0.6	184	0.1	651	0.7	48	0.0
3285 perfumes & cleansers	1,096	0.5	334	0.0	9,996	4.3	2,627	0.4
3286 plastics	11,759	0.7	2,471	0.0	57,737	3.4	27,206	0.4
3291 pesticides	2,533	3.8	301	0.2	162	0.2	737	0.4
3292 starches, gluten, glue	228	0.1	418	0.1	3,317	1.1	1,438	0.5
3293 explosives	811	1.1	235	1.7	—	—	1	0.0
3297 chemical additives	121	0.1	11,715	1.3	23	0.0	831	0.1
3298 wood & resin chem.	35,791	44.5	28	0.0	597	0.7	720	0.2
3299 chem. products nec	2,258	0.6	909	0.1	9,804	2.5	64,465	7.1
<b>Total crude materials, inedible except fuels</b>	<b>31,958,085</b>	<b>34.3</b>	<b>14,460,406</b>	<b>23.6</b>	<b>10,961,535</b>	<b>11.8</b>	<b>967,632</b>	<b>1.6</b>
<b>Subtotal forest products, wood and chips</b>	<b>852,810</b>	<b>22.4</b>	<b>567,879</b>	<b>2.8</b>	<b>53,932</b>	<b>1.4</b>	<b>10,458</b>	<b>0.1</b>
4110 rubber & gums	23	0.0	—	—	956	0.1	180	2.3
4150 fuel wood	27,595	60.3	—	—	1,106	2.4	310	0.3
4161 wood chips	78,190	28.0	306,637	3.4	—	—	909	0.0
4170 wood in the rough	71,949	40.9	258,652	3.2	4,172	2.4	7,657	0.1
4189 lumber	672,487	38.1	2,541	0.1	9,315	0.5	1,114	0.0
4190 forest products nec	2,566	0.9	49	0.1	38,383	13.2	288	0.6
<b>Subtotal pulp and waste paper</b>	<b>94,623</b>	<b>8.6</b>	<b>80,229</b>	<b>0.8</b>	<b>6,401</b>	<b>0.6</b>	<b>2,478</b>	<b>0.0</b>
4225 pulp & waste paper	94,623	8.6	80,229	0.8	6,401	0.6	2,478	0.0
<b>Subtotal soil, sand, gravel, rock and stone</b>	<b>13,542,987</b>	<b>50.7</b>	<b>4,312,687</b>	<b>75.4</b>	<b>8,537,932</b>	<b>31.9</b>	<b>4,825</b>	<b>0.1</b>
4310 building stone	12,460	15.4	108	0.1	328	0.4	44	0.0
4322 limestone	2,896,162	68.3	3,412,565	99.1	37,111	0.9	—	—
4323 gypsum	6,331,867	66.5	—	—	2,130,810	22.4	22	0.0
4327 phosphate rock	36,683	3.7	30,859	8.2	—	—	4,611	1.2
4331 sand & gravel	4,265,815	35.9	869,155	55.2	6,369,683	53.6	148	0.0
<b>Subtotal iron ore and scrap</b>	<b>12,325,778</b>	<b>56.5</b>	<b>7,119,761</b>	<b>49.4</b>	<b>26</b>	<b>0.0</b>	<b>772,352</b>	<b>5.4</b>
4410 iron ore	11,832,759	57.2	7,119,537	99.9	—	—	—	—
4420 iron & steel scrap	493,019	44.4	224	0.0	26	0.0	772,352	10.6
<b>Subtotal marine shells</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>236</b>	<b>7.7</b>	<b>17</b>	<b>0.6</b>
4515 marine shells	—	—	—	—	236	7.7	17	0.6
<b>Subtotal non-ferrous ores and scrap</b>	<b>145,239</b>	<b>0.7</b>	<b>1,225,407</b>	<b>36.2</b>	<b>102,590</b>	<b>0.5</b>	<b>124,227</b>	<b>3.7</b>
4630 copper ore	—	—	—	—	—	—	—	—
4650 aluminum ore	39,528	0.2	1,148,916	71.0	—	—	121,277	7.5

**Table 1-13: WATERBORNE TRADE WITH NAFTA PARTNERS, 1997 (continued)**  
 TONNAGE AND PERCENT OF TOTAL U.S. WATERBORNE IMPORTS AND EXPORTS  
 (short tons)

Commodity	Canada				Mexico			
	Imports from	%	Exports to	%	Imports from	%	Exports to	%
4670 manganese ore	—	—	—	—	87,723	21.4	—	—
4680 non-ferrous scrap	57,057	8.7	49	0.0	4,861	0.7	503	0.1
4690 non-ferrous ores nec	48,654	2.9	76,442	7.8	10,006	0.6	2,447	0.2
<b>Subtotal sulphur, clay and salt</b>	<b>789,280</b>	<b>39.1</b>	<b>332,230</b>	<b>6.5</b>	<b>540,647</b>	<b>26.8</b>	<b>52,187</b>	<b>1.0</b>
4741 sulphur, (dry)	—	—	—	—	540,385	77.2	42,438	5.4
4782 clay & refrac. mat.	789,280	59.9	332,230	7.7	262	0.0	9,749	0.2
<b>Subtotal slag</b>	<b>118,114</b>	<b>11.9</b>	<b>27,586</b>	<b>79.6</b>	<b>68,603</b>	<b>6.9</b>	<b>—</b>	<b>—</b>
4860 slag	118,114	11.9	27,586	79.6	68,603	6.9	—	—
<b>Subtotal other non-metal. min.</b>	<b>4,089,254</b>	<b>23.9</b>	<b>794,627</b>	<b>54.9</b>	<b>1,651,168</b>	<b>9.7</b>	<b>1,088</b>	<b>0.1</b>
4900 non-metal. min. nec	4,089,254	23.9	794,627	54.9	1,651,168	9.7	1,088	0.1
<b>Total primary manufactured goods</b>	<b>5,034,876</b>	<b>7.9</b>	<b>359,279</b>	<b>2.3</b>	<b>1,848,704</b>	<b>2.9</b>	<b>110,056</b>	<b>0.7</b>
<b>Subtotal paper products</b>	<b>1,092,776</b>	<b>28.8</b>	<b>7,085</b>	<b>0.1</b>	<b>11,350</b>	<b>0.3</b>	<b>71,853</b>	<b>0.8</b>
5110 newsprint	934,909	81.6	8	0.0	669	0.1	7,415	0.7
5120 paper & paperboard	155,303	6.5	6,157	0.1	3,574	0.2	61,072	0.8
5190 paper products nec	2,564	0.9	920	0.1	7,107	2.6	3,366	0.5
<b>Subtotal lime, cement and glass</b>	<b>3,401,509</b>	<b>16.5</b>	<b>282,731</b>	<b>13.6</b>	<b>65,482</b>	<b>0.3</b>	<b>7,054</b>	<b>0.3</b>
5210 lime	7,592	69.9	—	—	25	0.2	—	—
5220 cement & concrete	3,332,766	20.8	281,907	63.7	24,495	0.2	—	—
5240 glass & glass prod.	3,954	0.5	286	0.0	20,602	2.4	1,811	0.3
5290 misc. mineral prod.	57,197	1.5	538	0.1	20,360	0.5	5,243	0.5
<b>Subtotal primary iron and steel products</b>	<b>310,369</b>	<b>1.0</b>	<b>66,826</b>	<b>3.9</b>	<b>1,748,630</b>	<b>5.5</b>	<b>21,568</b>	<b>1.3</b>
5312 pig iron	274,855	5.8	—	—	79,291	5.5	—	—
5315 ferro alloys	110	0.0	—	—	—	—	—	—
5320 i&s primary forms	5,532	0.1	61,230	48.1	1,398,224	23.1	322	0.3
5330 i&s plates & sheets	27,907	0.2	5,266	0.8	23,890	0.2	3,194	0.5
5360 i&s bars & shapes	55	0.0	45	0.0	157,751	4.1	12,062	6.3
5370 i&s pipe & tube	1,735	0.1	263	0.0	84,436	3.9	5,787	1.0
5390 primary i&s nec	175	0.0	22	0.0	5,038	0.7	203	0.4
<b>Subtotal primary non-ferrous metal products</b>	<b>74,803</b>	<b>1.2</b>	<b>2,401</b>	<b>0.1</b>	<b>22,914</b>	<b>0.4</b>	<b>6,412</b>	<b>0.4</b>
5421 copper	144	0.0	21	0.0	927	0.2	346	0.2
5422 aluminum	65,164	5.8	963	0.2	272	0.0	2,098	0.3
5429 smelted prod. nec	599	0.1	123	0.1	4,786	0.7	289	0.2
5480 fab. metal products	8,896	0.2	1,294	0.2	16,929	0.5	3,679	0.5
<b>Subtotal primary wood products</b>	<b>155,419</b>	<b>9.8</b>	<b>236</b>	<b>0.0</b>	<b>328</b>	<b>0.0</b>	<b>3,169</b>	<b>0.3</b>
5540 primary wood prod.	155,419	9.8	236	0.0	328	0.0	3,169	0.3
<b>Total food and farm products</b>	<b>958,991</b>	<b>3.3</b>	<b>2,415,151</b>	<b>1.6</b>	<b>603,500</b>	<b>2.1</b>	<b>5,434,245</b>	<b>3.6</b>
<b>Subtotal fish</b>	<b>18,183</b>	<b>1.6</b>	<b>12,082</b>	<b>1.4</b>	<b>52,204</b>	<b>4.7</b>	<b>1,933</b>	<b>0.2</b>
6134 fish (not shellfish)	13,880	2.3	11,341	1.6	19,322	3.1	1,808	0.3
6136 shellfish	4,303	0.8	741	0.5	32,882	6.5	125	0.1
<b>Subtotal grain</b>	<b>792,737</b>	<b>44.8</b>	<b>1,142,997</b>	<b>1.4</b>	<b>—</b>	<b>—</b>	<b>3,779,919</b>	<b>4.7</b>
6241 wheat	251,487	99.5	224,530	0.8	—	—	746,442	2.7
6344 corn	511	0.6	460,873	1.1	—	—	1,689,017	3.8
6442 rice	8	0.0	350	0.0	—	—	62,935	2.8
6443 barley & rye	346,954	92.2	457,243	28.0	—	—	—	—
6445 oats	193,777	31.9	—	—	—	—	200	1.5
6447 sorghum grains	—	—	1	0.0	—	—	1,281,325	28.3
<b>Subtotal oilseeds</b>	<b>1,095</b>	<b>0.2</b>	<b>1,187,384</b>	<b>4.4</b>	<b>4,195</b>	<b>0.9</b>	<b>1,294,472</b>	<b>4.8</b>
6521 peanuts	1	0.0	39	0.0	—	—	282	0.2
6522 soybeans	220	0.1	1,164,131	4.4	—	—	1,261,461	4.7
6534 flaxseed	691	93.6	—	—	—	—	—	—
6590 oilseeds nec	183	0.1	23,214	8.2	4,195	2.6	32,729	11.6
<b>Subtotal vegetable products</b>	<b>69,381</b>	<b>2.6</b>	<b>1,706</b>	<b>0.0</b>	<b>14,790</b>	<b>0.5</b>	<b>198,240</b>	<b>4.3</b>
6653 vegetable oils	354	0.0	225	0.0	254	0.0	193,439	8.8
6654 vegetables & prod.	69,027	5.1	1,481	0.1	14,536	1.1	4,801	0.2
<b>Subtotal processed grain and animal feed</b>	<b>32,905</b>	<b>3.4</b>	<b>4,515</b>	<b>0.0</b>	<b>29,311</b>	<b>3.0</b>	<b>18,551</b>	<b>0.1</b>
6746 wheat flour	2,873	31.2	84	0.0	26	0.3	628	0.1
6747 grain mill products	5,485	1.2	600	0.1	9,363	2.0	2,740	0.4
6781 hay & fodder	2,484	63.3	87	0.0	—	—	—	—
6782 animal feed, prep.	22,063	4.4	3,744	0.0	19,922	4.0	15,183	0.1
<b>Subtotal other agricultural products</b>	<b>44,690</b>	<b>0.2</b>	<b>66,467</b>	<b>0.4</b>	<b>503,000</b>	<b>2.3</b>	<b>141,130</b>	<b>0.9</b>
6811 meat, fresh, frozen	8,210	1.1	1,956	0.1	1,560	0.2	1,966	0.1
6817 meat, prepared	2,112	1.4	190	0.1	166	0.1	843	0.3
6822 dairy products	4,729	1.4	1,828	0.6	1,179	0.4	5,273	1.7
6835 fish, prepared	8,497	2.0	42	0.0	2,573	0.6	556	0.5
6838 tallow, animal oils	111	0.7	1,543	0.2	—	—	115,059	11.7
6839 animals & prod. nec	2,256	1.1	125	0.0	208	0.1	1,266	0.2
6856 bananas & plantains	—	—	—	—	109,701	2.3	—	—
6857 fruit & nuts nec	1,743	0.1	1,643	0.1	24,987	1.3	2,408	0.1
6858 fruit juices	3,393	0.2	3,740	0.5	6,094	0.4	1,093	0.1
6861 sugar	—	—	15,329	12.8	18,939	0.6	—	—
6865 molasses	—	—	26,089	10.8	191,442	13.0	—	—
6871 coffee	1,032	0.1	2,478	2.1	79,288	5.8	774	0.6
6872 cocoa beans	62	0.0	—	—	5,988	0.9	2,129	16.0
6885 alcoholic beverages	5,006	0.2	5,287	0.6	30,526	1.1	1,668	0.2
6888 water & ice	366	0.1	5,096	12.7	204	0.0	116	0.3
6889 food products nec	1,586	0.2	863	0.1	19,629	2.0	7,232	0.5
6891 tobacco & products	330	0.1	—	—	8,808	2.3	97	0.0
6893 cotton	—	—	107	0.0	146	0.7	533	0.0

*Table 1-13: WATERBORNE TRADE WITH NAFTA PARTNERS, 1997 (continued)*  
 TONNAGE AND PERCENT OF TOTAL U.S. WATERBORNE IMPORTS AND EXPORTS  
 (short tons)

Commodity	Canada				Mexico			
	Imports from	%	Exports to	%	Imports from	%	Exports to	%
6894 natural fibers nec	—	—	—	—	400	1.3	77	3.0
6899 farm products nec	5,257	3.6	151	0.1	1,162	0.8	40	0.0
<b>Total all manufactured equipment, machinery and products</b>	<b>48,869</b>	<b>0.1</b>	<b>141,328</b>	<b>1.0</b>	<b>304,344</b>	<b>0.9</b>	<b>95,832</b>	<b>0.7</b>
7110 machinery (not elec)	12,957	0.3	12,493	0.3	9,786	0.2	17,237	0.5
7120 electrical machinery	5,909	0.1	115,720	6.3	28,784	0.6	13,485	0.7
7210 vehicles & parts	4,944	0.1	787	0.0	148,822	2.6	10,498	0.5
7220 aircraft & parts	33	0.1	22	0.1	—	0.0	23	0.1
7230 ships & boats	3,341	8.3	1,067	0.7	252	0.6	2,049	1.3
7300 ordnance & access.	19	0.1	49	0.1	—	—	13	0.0
7400 manufac. wood prod.	6,505	1.2	199	0.1	2,546	0.5	643	0.2
7500 textile products	5,366	0.1	1,375	0.1	79,152	1.7	35,312	1.6
7600 rubber & plastic pr.	2,609	0.1	2,651	0.2	10,558	0.4	4,365	0.3
7900 manufac. prod. nec	7,186	0.1	6,965	0.4	24,436	0.3	12,207	0.8
<b>Total unknown or not elsewhere classified</b>	<b>66,344</b>	<b>12.8</b>	<b>5,602</b>	<b>1.3</b>	<b>7,690</b>	<b>1.5</b>	<b>2,275</b>	<b>0.5</b>
9900 unknown or nec	66,344	12.8	5,602	1.3	7,690	1.5	2,275	0.5

## Section 2

### Commodities

**Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE  
BY TYPE OF TRAFFIC AND COMMODITY**

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1988	2,087,993	1991	2,092,108	1994	2,214,754	1997	2,333,142
1989	2,140,442	1992	2,133,310	1995	2,240,393		
1990	2,163,854	1993	2,128,221	1996	2,284,065		

Freight Traffic, 1997  
(thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory
<b>Total, all commodities</b>	<b>2,333,142</b>	<b>788,303</b>	<b>432,313</b>	<b>1,112,527</b>	<b>263,146</b>	<b>122,734</b>	<b>630,558</b>	<b>89,816</b>	<b>6,273</b>
<b>Total coal</b>	<b>326,003</b>	<b>10,292</b>	<b>83,375</b>	<b>232,336</b>	<b>15,422</b>	<b>22,892</b>	<b>175,989</b>	<b>18,033</b>	<b>—</b>
1100 coal lignite	317,918	7,013	82,618	228,286	15,291	22,533	172,477	17,985	—
1200 coal coke	8,086	3,279	757	4,050	131	359	3,512	48	—
<b>Total petroleum and petroleum products</b>	<b>988,233</b>	<b>533,468</b>	<b>58,072</b>	<b>396,693</b>	<b>190,163</b>	<b>2,174</b>	<b>155,542</b>	<b>42,853</b>	<b>5,962</b>
<b>Subtotal crude petroleum</b>	<b>553,330</b>	<b>429,301</b>	<b>3,627</b>	<b>120,402</b>	<b>77,081</b>	<b>—</b>	<b>41,850</b>	<b>1,471</b>	<b>—</b>
2100 crude petroleum	553,330	429,301	3,627	120,402	77,081	—	41,850	1,471	—
<b>Subtotal petroleum products</b>	<b>434,903</b>	<b>104,167</b>	<b>54,445</b>	<b>276,292</b>	<b>113,082</b>	<b>2,174</b>	<b>113,691</b>	<b>41,382</b>	<b>5,962</b>
2211 gasoline	114,635	19,374	5,786	89,475	49,380	363	30,026	7,373	2,333
2221 kerosene	8,825	4,977	1,642	2,206	732	—	845	506	123
2330 distillate fuel oil	88,224	16,619	5,879	65,727	29,273	343	24,738	10,097	1,277
2340 residual fuel oil	114,389	29,198	8,519	76,672	26,365	213	29,188	18,704	2,201
2350 lube oil & greases	18,425	11,144	1,662	5,619	1,742	—	3,284	594	—
2410 petro. jelly & waxes	411	124	116	171	81	—	90	—	—
2429 naphtha & solvents	23,109	13,825	3,473	5,812	640	—	3,748	1,395	28
2430 asphalt, tar & pitch	19,164	584	3,960	14,620	3,578	1,028	9,087	927	—
2540 petroleum coke	34,707	4,020	21,239	9,448	406	226	7,693	1,123	0
2640 liquid natural gas	8,998	4,303	2,170	2,525	282	1	2,171	71	—
2990 petro. products nec	4,016	—	—	4,016	603	—	2,822	592	—
<b>Total chemicals and related products</b>	<b>156,622</b>	<b>25,056</b>	<b>50,537</b>	<b>81,029</b>	<b>16,963</b>	<b>131</b>	<b>53,585</b>	<b>10,235</b>	<b>116</b>
<b>Subtotal fertilizers</b>	<b>33,788</b>	<b>4,280</b>	<b>16,030</b>	<b>13,478</b>	<b>1,920</b>	<b>0</b>	<b>11,431</b>	<b>126</b>	<b>—</b>
3110 nitrogenous fert.	10,561	2,345	1,983	6,233	391	—	5,742	99	—
3120 phosphatic fert.	2,849	79	757	2,013	283	—	1,728	2	—
3130 potassic fert.	3,823	1,291	1,256	1,276	35	—	1,237	4	—
3190 fert. & mixes nec	16,555	565	12,034	3,956	1,211	0	2,724	21	—
<b>Subtotal other chemicals and related products</b>	<b>122,835</b>	<b>20,775</b>	<b>34,508</b>	<b>67,551</b>	<b>15,043</b>	<b>131</b>	<b>42,154</b>	<b>10,109</b>	<b>116</b>
3211 acyclic hydrocarbons	3,848	431	939	2,478	26	—	2,261	191	—
3212 benzene & toluene	7,049	292	325	6,431	283	—	4,055	2,063	30
3219 other hydrocarbons	19,295	870	4,471	13,954	2,770	—	9,059	2,040	86
3220 alcohols	14,177	3,587	2,814	7,776	727	—	5,562	1,487	—
3230 carboxylic acids	4,825	669	2,216	1,939	165	—	1,071	703	—
3240 nitrogen func. comp.	3,728	353	1,711	1,663	12	—	1,631	20	—
3250 organo-inorganic comp.	975	344	586	45	5	—	38	2	—
3260 organic comp. nec	6,777	4,049	1,361	1,367	193	—	1,134	40	—
3271 sulphur (liquid)	8,919	0	100	8,820	4,131	—	4,559	129	—
3272 sulphuric acid	2,622	799	31	1,793	18	—	1,422	353	—
3273 ammonia	6,774	3,381	577	2,815	329	—	2,463	23	—
3274 sodium hydroxide	11,038	599	2,950	7,488	2,088	—	4,757	643	—
3275 inorg. elem., oxides, & halogen salts	3,423	766	1,136	1,521	44	—	980	497	—
3276 metallic salts	7,030	892	4,908	1,229	55	131	962	83	—

Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE

BY TYPE OF TRAFFIC AND COMMODITY

Freight Traffic, 1997 - continued

(thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory
3279 inorganic chem. nec	606	325	49	231	2	—	230	—	—
3281 radioactive material	45	29	15	1	1	—	—	—	—
3282 pigments & paints	874	216	612	46	43	—	3	—	—
3283 coloring mat. nec	195	125	69	2	2	—	—	—	—
3284 medicines	369	91	155	124	122	—	0	2	—
3285 perfumes & cleansers	1,128	234	731	163	161	—	2	—	—
3286 plastics	7,841	1,694	6,046	101	93	—	7	—	—
3291 pesticides	264	67	167	30	29	—	—	1	—
3292 starches, gluten, glue	635	312	307	16	16	—	—	—	—
3293 explosives	91	75	14	3	2	—	1	0	—
3297 chemical additives	7,704	107	930	6,666	3,358	—	1,593	1,715	—
3298 wood & resin chem.	676	80	376	220	123	—	97	—	—
3299 chem. products nec	1,927	387	912	628	245	—	266	117	—
<b>Total crude materials, inedible except fuels*</b>	<b>400,946</b>	<b>93,171</b>	<b>61,270</b>	<b>246,504</b>	<b>18,042</b>	<b>93,405</b>	<b>121,945</b>	<b>13,102</b>	<b>9</b>
<b>Subtotal forest products, wood and chips</b>	<b>44,079</b>	<b>3,813</b>	<b>20,534</b>	<b>19,731</b>	<b>1,743</b>	<b>2</b>	<b>15,178</b>	<b>2,809</b>	<b>—</b>
4110 rubber & gums	1,275	1,258	8	9	7	—	2	—	—
4150 fuel wood	269	46	121	102	2	—	100	0	—
4161 wood chips	16,750	279	9,039	7,432	510	0	6,912	10	—
4170 wood in the rough	19,542	176	8,077	11,290	555	1	7,935	2,799	—
4189 lumber	5,751	1,765	3,241	745	624	1	120	0	—
4190 forest products nec	492	290	48	153	44	—	110	—	—
<b>Subtotal pulp and waste paper</b>	<b>11,952</b>	<b>1,104</b>	<b>10,606</b>	<b>242</b>	<b>81</b>	<b>—</b>	<b>161</b>	<b>—</b>	<b>—</b>
4225 pulp & waste paper	11,952	1,104	10,606	242	81	—	161	—	—
<b>Subtotal soil, sand, gravel, rock and stone*</b>	<b>167,832</b>	<b>26,729</b>	<b>5,719</b>	<b>135,384</b>	<b>14,484</b>	<b>31,802</b>	<b>79,541</b>	<b>9,552</b>	<b>4</b>
4310 building stone	350	81	149	120	0	—	120	—	—
4322 limestone	64,915	4,240	3,445	57,230	787	30,067	26,327	49	—
4323 gypsum	11,464	9,526	171	1,766	7	1,054	706	—	—
4327 phosphate rock	7,643	1,002	378	6,262	6,103	—	159	—	—
4331 sand & gravel	83,412	11,880	1,575	69,956	7,574	681	52,194	9,502	4
4338 soil & fill dirt	48	—	—	48	12	0	35	1	—
<b>Subtotal iron ore and scrap</b>	<b>107,272</b>	<b>21,805</b>	<b>14,410</b>	<b>71,058</b>	<b>1,045</b>	<b>59,933</b>	<b>9,423</b>	<b>657</b>	<b>—</b>
4410 iron ore	92,209	20,695	7,124	64,391	7	59,766	4,336	282	—
4420 iron & steel scrap	15,063	1,110	7,286	6,667	1,039	167	5,086	375	—
<b>Subtotal marine shells</b>	<b>586</b>	<b>3</b>	<b>3</b>	<b>581</b>	<b>0</b>	<b>—</b>	<b>563</b>	<b>17</b>	<b>—</b>
4515 marine shells	586	3	3	581	0	—	563	17	—
<b>Subtotal non-ferrous ores and scrap</b>	<b>28,265</b>	<b>19,625</b>	<b>3,388</b>	<b>5,252</b>	<b>47</b>	<b>—</b>	<b>5,195</b>	<b>10</b>	<b>—</b>
4630 copper ore	200	41	143	16	0	—	16	—	—
4650 aluminum ore	21,707	16,815	1,618	3,274	18	—	3,255	—	—
4670 manganese ore	1,079	411	91	578	—	—	568	10	—
4680 non-ferrous scrap	1,245	658	554	33	6	—	27	—	—
4690 non-ferrous ores nec	4,034	1,700	983	1,351	22	—	1,329	—	—
<b>Subtotal sulphur, clay and salt</b>	<b>8,624</b>	<b>2,017</b>	<b>5,129</b>	<b>1,477</b>	<b>138</b>	<b>—</b>	<b>1,331</b>	<b>4</b>	<b>4</b>
4741 sulphur, (dry)	1,495	700	790	4	0	—	—	—	4
4782 clay & refrac. mat.	7,129	1,317	4,339	1,473	138	—	1,331	4	—
<b>Subtotal slag</b>	<b>2,831</b>	<b>996</b>	<b>35</b>	<b>1,800</b>	<b>65</b>	<b>728</b>	<b>1,007</b>	<b>—</b>	<b>—</b>
4860 slag	2,831	996	35	1,800	65	728	1,007	—	—
<b>Subtotal other non-metal. min.</b>	<b>29,505</b>	<b>17,078</b>	<b>1,448</b>	<b>10,979</b>	<b>440</b>	<b>940</b>	<b>9,546</b>	<b>53</b>	<b>—</b>
4900 non-metal. min. nec	29,505	17,078	1,448	10,979	440	940	9,546	53	—

\* Does not include 6.7 million short tons of waterway improvement material.

Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE  
BY TYPE OF TRAFFIC AND COMMODITY  
Freight Traffic, 1997 - continued  
(thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory
<b>Total primary manufactured goods</b>	<b>116,960</b>	<b>63,909</b>	<b>15,873</b>	<b>37,178</b>	<b>7,519</b>	<b>3,629</b>	<b>25,175</b>	<b>856</b>	—
Subtotal paper products	14,361	3,793	9,143	1,425	596	—	826	4	—
5110 newsprint	2,245	1,146	1,028	71	11	—	60	—	—
5120 paper & paperboard	10,830	2,374	7,417	1,040	371	—	666	4	—
5190 paper products nec	1,286	274	698	314	214	—	100	0	—
<b>Subtotal lime, cement and glass</b>	<b>38,408</b>	<b>20,643</b>	<b>2,080</b>	<b>15,686</b>	<b>2,800</b>	<b>3,258</b>	<b>8,922</b>	<b>705</b>	—
5210 lime	2,478	11	11	2,456	0	—	2,456	—	—
5220 cement & concrete	29,150	15,986	443	12,721	2,561	3,258	6,198	705	—
5240 glass & glass prod.	1,592	870	600	122	63	—	59	—	—
5290 misc. mineral prod.	5,188	3,776	1,025	386	176	0	209	1	—
<b>Subtotal primary iron and steel products</b>	<b>47,995</b>	<b>31,881</b>	<b>1,705</b>	<b>14,409</b>	<b>163</b>	<b>371</b>	<b>13,736</b>	<b>138</b>	—
5312 pig iron	8,139	4,767	84	3,288	0	10	3,269	8	—
5315 ferro alloys	2,490	1,447	31	1,012	—	—	985	27	—
5320 i&s primary forms	7,775	6,057	127	1,591	35	—	1,552	4	—
5330 i&s plates & sheets	18,470	12,817	622	5,030	6	360	4,624	40	—
5360 i&s bars & shapes	5,136	3,895	191	1,050	51	—	995	3	—
5370 i&s pipe & tube	3,994	2,162	599	1,233	26	0	1,167	40	—
5390 primary i&s nec	1,991	738	50	1,204	45	—	1,143	16	—
<b>Subtotal primary non-ferrous metal products</b>	<b>13,187</b>	<b>6,001</b>	<b>1,782</b>	<b>5,404</b>	<b>3,845</b>	<b>0</b>	<b>1,551</b>	<b>8</b>	—
5421 copper	819	616	183	20	7	—	12	2	—
5422 aluminum	1,974	1,131	638	205	18	—	187	—	—
5429 smelted prod. nec	974	676	168	130	12	—	118	—	—
5480 fab. metal products	9,419	3,578	792	5,049	3,808	0	1,234	6	—
<b>Subtotal primary wood products</b>	<b>3,009</b>	<b>1,591</b>	<b>1,164</b>	<b>254</b>	<b>115</b>	—	<b>140</b>	—	—
5540 primary wood prod.	3,009	1,591	1,164	254	115	—	140	—	—
<b>Total food and farm products*</b>	<b>271,742</b>	<b>29,056</b>	<b>149,032</b>	<b>93,654</b>	<b>7,622</b>	<b>468</b>	<b>85,245</b>	<b>318</b>	<b>0</b>
<b>Subtotal fish*</b>	<b>2,102</b>	<b>1,122</b>	<b>863</b>	<b>118</b>	<b>117</b>	<b>0</b>	—	—	<b>0</b>
6134 fish (not shellfish)	1,427	616	718	93	92	0	—	—	0
6136 shellfish	676	506	144	25	25	—	—	—	—
<b>Subtotal grain</b>	<b>131,023</b>	<b>1,768</b>	<b>80,192</b>	<b>49,063</b>	<b>654</b>	<b>465</b>	<b>47,887</b>	<b>56</b>	—
6241 wheat	40,611	253	27,921	12,438	224	445	11,755	13	—
6344 corn	77,057	82	43,880	33,096	298	—	32,768	30	—
6442 rice	3,998	448	2,219	1,331	130	—	1,201	—	—
6443 barley & rye	2,562	376	1,633	553	1	—	549	3	—
6445 oats	795	608	13	174	1	20	149	3	—
6447 sorghum grains	6,000	1	4,527	1,472	—	—	1,465	7	—
<b>Subtotal oilseeds</b>	<b>53,369</b>	<b>457</b>	<b>27,085</b>	<b>25,828</b>	<b>83</b>	—	<b>25,712</b>	<b>33</b>	—
6521 peanuts	221	63	152	6	6	—	—	—	—
6522 soybeans	48,372	230	26,647	21,495	20	—	21,450	25	—
6534 flaxseed	4	1	3	—	—	—	—	—	—
6590 oilseeds nec	4,773	163	283	4,327	57	—	4,262	8	—
<b>Subtotal vegetable products</b>	<b>8,924</b>	<b>2,719</b>	<b>4,575</b>	<b>1,630</b>	<b>396</b>	—	<b>1,219</b>	<b>14</b>	<b>0</b>
6653 vegetable oils	4,804	1,354	2,198	1,251	57	—	1,180	14	—
6654 vegetables & prod.	4,120	1,364	2,377	379	340	—	39	—	—
<b>Subtotal processed grain and animal feed</b>	<b>30,771</b>	<b>975</b>	<b>21,058</b>	<b>8,738</b>	<b>667</b>	<b>0</b>	<b>7,958</b>	<b>113</b>	—
6746 wheat flour	612	9	518	85	44	—	41	—	—
6747 grain mill products	1,856	465	690	701	335	—	356	10	—
6781 hay & fodder	3,193	4	3,142	47	15	—	32	—	—
6782 animal feed, prep.	25,110	497	16,708	7,905	272	0	7,529	103	—

\* Does not include 1.5 million short tons of internal and intraport fish.

Table 2-1: SUMMARY OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE

BY TYPE OF TRAFFIC AND COMMODITY

Freight Traffic, 1997 - continued

(thousand short tons)

Commodity	Grand Total	Foreign		Domestic					
		Imports	Exports	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory
<b>Subtotal other agricultural products</b>	<b>45,553</b>	<b>22,016</b>	<b>15,259</b>	<b>8,278</b>	<b>5,705</b>	<b>2</b>	<b>2,469</b>	<b>102</b>	<b>0</b>
6811 meat, fresh, frozen	4,797	774	3,777	245	245	—	0	—	—
6817 meat, prepared	504	148	282	74	74	—	—	—	—
6822 dairy products	739	337	302	100	100	—	—	—	—
6835 fish, prepared	586	422	123	41	19	—	20	2	—
6838 tallow, animal oils	1,019	16	984	18	5	—	12	1	—
6839 animals & prod. nec	1,772	213	836	723	705	—	18	0	—
6856 bananas & plantains	4,881	4,858	9	13	13	—	—	—	0
6857 fruit & nuts nec	4,969	1,989	2,594	386	385	0	—	—	—
6858 fruit juices	2,754	1,677	801	276	276	—	0	—	—
6861 sugar	5,224	3,205	120	1,900	1,315	1	584	—	—
6865 molasses	2,402	1,474	241	687	239	—	391	58	—
6871 coffee	1,515	1,377	120	17	17	—	—	—	—
6872 cocoa beans	661	633	13	15	15	—	—	—	—
6885 alcoholic beverages	4,524	2,865	891	768	570	—	198	—	—
6887 groceries	771	—	—	771	731	0	33	7	—
6888 water & ice	1,542	471	40	1,030	24	—	981	25	—
6889 food products nec	3,630	966	1,598	1,065	843	0	212	9	—
6891 tobacco & products	1,175	391	753	31	31	—	—	—	—
6893 cotton	1,590	20	1,567	3	2	—	1	—	—
6894 natural fibers nec	35	32	3	0	0	—	—	—	—
6899 farm products nec	464	148	205	112	92	—	19	—	—
<b>Total all manufactured equipment, machinery and products</b>	<b>66,068</b>	<b>32,834</b>	<b>13,731</b>	<b>19,503</b>	<b>7,346</b>	<b>23</b>	<b>11,763</b>	<b>185</b>	<b>186</b>
7110 machinery (not elec)	18,151	5,063	3,817	9,270	311	1	8,926	10	21
7120 electrical machinery	6,930	4,891	1,844	195	183	—	13	0	—
7210 vehicles & parts	9,162	5,713	2,300	1,149	1,118	0	25	1	6
7220 aircraft & parts	52	23	27	2	2	—	0	—	—
7230 ships & boats	213	40	162	11	4	—	3	3	—
7300 ordnance & access.	109	21	85	3	3	—	—	—	—
7400 manufac. wood prod.	988	528	289	170	92	0	78	0	—
7500 textile products	7,133	4,742	2,157	234	178	—	56	0	—
7600 rubber & plastic pr.	4,358	2,720	1,437	201	95	—	106	0	—
7800 empty containers	412	—	—	412	6	—	406	0	—
7900 manufac. prod. nec	18,561	9,093	1,611	7,857	5,355	22	2,150	171	158
<b>Total waste and scrap nec</b>	<b>5,545</b>	<b>—</b>	<b>—</b>	<b>5,545</b>	<b>1</b>	<b>0</b>	<b>1,310</b>	<b>4,234</b>	<b>—</b>
8900 waste and scrap nec	5,545	—	—	5,545	1	0	1,310	4,234	—
<b>Total unknown or not elsewhere classified</b>	<b>1,021</b>	<b>517</b>	<b>421</b>	<b>83</b>	<b>67</b>	<b>13</b>	<b>4</b>	<b>—</b>	<b>0</b>
9900 unknown or nec	1,021	517	421	83	67	13	4	—	0

Table 2-2: SUMMARY OF DOMESTIC WATERBORNE COMMERCE, TON-MILES BY TYPE OF TRAFFIC AND COMMODITY

## Comparative Statement of Traffic (million short ton-miles)

Year	Total	Year	Total	Year	Total	Year	Total
1988	890,028	1991	848,399	1994	814,919	1997	707,409
1989	815,549	1992	856,684	1995	807,727		
1990	833,543	1993	789,657	1996	764,686		

Freight Traffic, 1997  
(million short ton-miles)

Commodity	Grand Total	Coastwise	Lakewise	Internal	Intraport
<b>Total, all commodities</b>	<b>707,409</b>	<b>349,842</b>	<b>62,165</b>	<b>294,022</b>	<b>1,378</b>
<b>Total coal</b>	<b>95,635</b>	<b>10,312</b>	<b>12,036</b>	<b>72,791</b>	<b>496</b>
1100 coal lignite	92,328	10,211	11,851	69,769	495
1200 coal coke	3,306	100	184	3,021	0
<b>Total petroleum and petroleum products</b>	<b>299,159</b>	<b>260,741</b>	<b>679</b>	<b>37,224</b>	<b>512</b>
<b>Subtotal crude petroleum</b>	<b>147,320</b>	<b>142,562</b>	<b>—</b>	<b>4,739</b>	<b>19</b>
2100 crude petroleum	147,320	142,562	—	4,739	19
<b>Subtotal petroleum products</b>	<b>151,838</b>	<b>118,179</b>	<b>679</b>	<b>32,485</b>	<b>493</b>
2211 gasoline	61,196	52,254	119	8,701	121
2221 kerosene	698	472	—	219	6
2330 distillate fuel oil	37,079	31,196	90	5,651	140
2340 residual fuel oil	29,533	23,728	30	5,628	146
2350 lube oil & greases	6,587	4,142	—	2,441	3
2410 petro. jelly & waxes	249	193	—	55	—
2429 naphtha & solvents	2,483	1,450	—	1,021	10
2430 asphalt, tar & pitch	8,261	3,276	355	4,620	9
2540 petroleum coke	3,530	558	84	2,836	50
2640 liquid natural gas	766	214	0	551	0
2990 petro. products nec	1,452	690	—	757	4
<b>Total chemicals and related products</b>	<b>67,519</b>	<b>36,649</b>	<b>42</b>	<b>30,715</b>	<b>111</b>
<b>Subtotal fertilizers</b>	<b>11,275</b>	<b>2,075</b>	<b>0</b>	<b>9,199</b>	<b>1</b>
3110 nitrogenous fert.	5,289	705	—	4,582	1
3120 phosphatic fert.	899	223	—	675	0
3130 potassic fert.	741	36	—	705	0
3190 fert. & mixes nec	4,344	1,109	0	3,235	0
<b>Subtotal other chemicals and related products</b>	<b>56,243</b>	<b>34,574</b>	<b>42</b>	<b>21,516</b>	<b>110</b>
3211 acyclic hydrocarbons	736	126	—	608	1
3212 benzene & toluene	2,473	1,405	—	1,034	33
3219 other hydrocarbons	13,102	6,276	—	6,809	16
3220 alcohols	5,765	1,906	—	3,841	17
3230 carboxylic acids	898	383	—	510	4
3240 nitrogen func. comp.	1,038	30	—	1,006	0
3250 organo-inorganic comp.	10	8	—	2	0
3260 organic comp. nec	1,185	479	—	705	0
3271 sulphur (liquid)	4,536	4,130	—	404	1
3272 sulphuric acid	281	9	—	266	5
3273 ammonia	1,947	566	—	1,381	0
3274 sodium hydroxide	7,433	4,182	—	3,243	7
3275 inorg. elem., oxides, & halogen salts	614	74	—	536	3
3276 metallic salts	508	40	42	425	0
3279 inorganic chem. nec	291	2	—	288	—
3281 radioactive material	1	1	—	—	—
3282 pigments & paints	100	97	—	2	—
3283 coloring mat. nec	2	2	—	—	—
3284 medicines	190	190	—	0	0
3285 perfumes & cleansers	298	297	—	0	—
3286 plastics	164	157	—	6	—
3291 pesticides	43	43	—	—	0
3292 starches, gluten, glue	18	18	—	—	—
3293 explosives	4	4	—	0	0
3297 chemical additives	13,515	13,227	—	271	15
3298 wood & resin chem.	464	460	—	4	—
3299 chem. products nec	614	448	—	165	0
<b>Total crude materials, inedible except fuels*</b>	<b>105,818</b>	<b>11,232</b>	<b>47,914</b>	<b>46,536</b>	<b>134</b>
<b>Subtotal forest products, wood and chips</b>	<b>5,042</b>	<b>1,603</b>	<b>0</b>	<b>3,433</b>	<b>5</b>
4110 rubber & gums	10	9	—	0	—
4150 fuel wood	25	4	—	20	0
4161 wood chips	2,603	231	0	2,372	0
4170 wood in the rough	1,183	305	0	872	5
4189 lumber	1,094	986	0	107	0
4190 forest products nec	124	64	—	59	—
<b>Subtotal pulp and waste paper</b>	<b>162</b>	<b>142</b>	<b>—</b>	<b>20</b>	<b>—</b>
4225 pulp & waste paper	162	142	—	20	—
<b>Subtotal soil, sand, gravel, rock and stone*</b>	<b>36,718</b>	<b>7,256</b>	<b>9,507</b>	<b>19,831</b>	<b>122</b>
4310 building stone	102	0	—	102	—
4322 limestone	20,982	343	9,065	11,572	1
4323 gypsum	947	9	313	624	—
4327 phosphate rock	5,773	5,589	—	184	—
4331 sand & gravel	8,880	1,297	128	7,334	121
4338 soil & fill dirt	31	17	0	13	0
<b>Subtotal iron ore and scrap</b>	<b>45,516</b>	<b>1,701</b>	<b>37,834</b>	<b>5,974</b>	<b>5</b>
4410 iron ore	40,599	5	37,698	2,894	0
4420 iron & steel scrap	4,916	1,696	135	3,079	5
<b>Subtotal marine shells</b>	<b>81</b>	<b>0</b>	<b>—</b>	<b>80</b>	<b>0</b>
4515 marine shells	81	0	—	80	0
<b>Subtotal non-ferrous ores and scrap</b>	<b>5,536</b>	<b>95</b>	<b>—</b>	<b>5,440</b>	<b>0</b>
4630 copper ore	17	0	—	16	—
4650 aluminum ore	4,204	43	—	4,160	—
4670 manganese ore	668	—	—	667	—
4680 non-ferrous scrap	33	9	—	24	—

\*Ton-miles not computed for 6.7 million short tons of waterway improvement material.

**Table 2-2: SUMMARY OF DOMESTIC WATERBORNE COMMERCE, TON-MILES  
BY TYPE OF TRAFFIC AND COMMODITY**  
Freight Traffic, 1997 - continued  
(million short ton-miles)

	Commodity	Grand Total	Coastwise	Lakewise	Internal	Intraport
4690	non-ferrous ores nec	612	42	—	570	—
	<b>Subtotal sulphur, clay and salt</b>	<b>477</b>	<b>46</b>	—	<b>430</b>	<b>0</b>
4741	sulphur, (dry)	0	0	—	—	—
4782	clay & refrac. mat.	476	46	—	430	0
	<b>Subtotal slag</b>	<b>1,332</b>	<b>66</b>	<b>335</b>	<b>930</b>	—
4860	slag	1,332	66	335	930	—
	<b>Subtotal other non-metal. min.</b>	<b>10,952</b>	<b>320</b>	<b>237</b>	<b>10,393</b>	<b>1</b>
4900	non-metal. min. nec	10,952	320	237	10,393	1
	<b>Total primary manufactured goods</b>	<b>27,024</b>	<b>5,400</b>	<b>1,066</b>	<b>20,536</b>	<b>20</b>
	<b>Subtotal paper products</b>	<b>1,270</b>	<b>1,095</b>	—	<b>174</b>	<b>0</b>
5110	newsprint	82	20	—	61	—
5120	paper & paperboard	715	657	—	57	0
5190	paper products nec	472	417	—	55	0
	<b>Subtotal lime, cement and glass</b>	<b>7,087</b>	<b>1,884</b>	<b>1,054</b>	<b>4,128</b>	<b>19</b>
5210	lime	997	0	—	997	—
5220	cement & concrete	5,501	1,410	1,054	3,017	19
5240	glass & glass prod.	137	81	—	56	—
5290	misc. mineral prod.	450	393	0	56	0
	<b>Subtotal primary iron and steel products</b>	<b>15,000</b>	<b>284</b>	<b>11</b>	<b>14,702</b>	—
5312	pig iron	3,427	0	3	3,423	1
5315	ferro alloys	1,391	—	—	1,390	1
5320	i&s primary forms	2,021	32	—	1,988	0
5330	i&s plates & sheets	4,747	10	8	4,727	0
5360	i&s bars & shapes	1,249	157	—	1,092	0
5370	i&s pipe & tube	943	29	0	913	0
5390	primary i&s nec	1,220	54	—	1,166	0
	<b>Subtotal primary non-ferrous metal products</b>	<b>3,294</b>	<b>1,850</b>	<b>0</b>	<b>1,443</b>	<b>0</b>
5421	copper	21	9	—	11	0
5422	aluminum	229	23	—	206	—
5429	smelted prod. nec	155	20	—	135	—
5480	fab. metal products	2,887	1,797	0	1,089	0
	<b>Subtotal primary wood products</b>	<b>371</b>	<b>284</b>	—	<b>87</b>	—
5540	primary wood prod.	371	284	—	87	—
	<b>Total food and farm products*</b>	<b>99,160</b>	<b>13,862</b>	<b>425</b>	<b>84,871</b>	<b>2</b>
	<b>Subtotal fish*</b>	<b>212</b>	<b>212</b>	<b>0</b>	—	—
6134	fish (not shellfish)	182	182	0	—	—
6136	shellfish	29	29	—	—	—
	<b>Subtotal grain</b>	<b>50,300</b>	<b>1,274</b>	<b>424</b>	<b>48,601</b>	<b>0</b>
6241	wheat	8,179	338	409	7,431	0
6344	corn	39,561	604	—	38,955	0
6442	rice	1,017	326	—	691	—
6443	barley & rye	174	1	—	172	0
6445	oats	156	2	15	137	0
6447	sorghum grains	1,211	—	—	1,211	—
	<b>Subtotal oilseeds</b>	<b>25,905</b>	<b>147</b>	—	<b>25,757</b>	<b>0</b>
6521	peanuts	4	4	—	—	—
6522	soybeans	21,711	40	—	21,671	0
6590	oilseeds nec	4,189	102	—	4,086	0
	<b>Subtotal vegetable products</b>	<b>1,895</b>	<b>866</b>	—	<b>1,028</b>	<b>0</b>
6653	vegetable oils	1,116	100	—	1,015	0
6654	vegetables & prod.	779	766	—	13	—
	<b>Subtotal processed grain and animal feed</b>	<b>9,675</b>	<b>1,236</b>	<b>0</b>	<b>8,438</b>	<b>0</b>
6746	wheat flour	154	128	—	25	—
6747	grain mill products	960	572	—	387	0
6781	hay & fodder	37	30	—	7	—
6782	animal feed, prep.	8,522	504	0	8,018	0
	<b>Subtotal other agricultural products</b>	<b>11,171</b>	<b>10,125</b>	<b>0</b>	<b>1,044</b>	<b>0</b>
6811	meat, fresh, frozen	498	498	—	0	—
6817	meat, prepared	152	152	—	—	—
6822	dairy products	198	198	—	—	—
6835	fish, prepared	46	32	—	14	0
6838	tallow, animal oils	12	8	—	3	0
6839	animals & prod. nec	1,032	1,022	—	9	0
6856	bananas & plantains	34	34	—	—	—
6857	fruit & nuts nec	906	906	0	—	—
6858	fruit juices	496	496	—	0	—
6861	sugar	2,227	1,977	0	250	—
6865	molasses	738	422	—	316	0
6871	coffee	29	29	—	—	—
6872	cocoa beans	11	11	—	—	—
6885	alcoholic beverages	1,272	1,032	—	240	—
6887	groceries	1,354	1,335	0	18	0
6888	water & ice	55	26	—	28	0
6889	food products nec	1,713	1,578	0	135	0
6891	tobacco & products	43	43	—	0	—
6893	cotton	4	3	—	—	—
6894	natural fibers nec	0	0	—	—	—
6899	farm products nec	340	313	—	26	—
	<b>Total all manufactured equipment, machinery and products</b>	<b>12,623</b>	<b>11,507</b>	<b>0</b>	<b>1,114</b>	<b>1</b>
7110	machinery (not elec)	888	643	0	243	0
7120	electrical machinery	317	307	—	10	0
7210	vehicles & parts	1,310	1,298	0	11	0
7220	aircraft & parts	2	2	—	0	—
7230	ships & boats	15	13	—	1	0
7300	ordnance & access.	13	13	—	—	—
7400	manufac. wood prod.	249	188	0	60	0
7500	textile products	354	298	—	56	—
7600	rubber & plastic pr.	224	154	—	69	0
7800	empty containers	95	3	—	91	0

\* Ton-miles not computed for 1.5 million short tons of internal and intraport fish.

**Table 2-2: SUMMARY OF DOMESTIC WATERBORNE COMMERCE, TON-MILES  
BY TYPE OF TRAFFIC AND COMMODITY**  
Freight Traffic, 1997 - continued  
(million short ton-miles)

Commodity	Grand Total	Coastwise	Lakewise	Internal	Intraport
7900 manufac. prod. nec	9,152	8,583	0	568	0
<b>Total waste and scrap nec</b>	<b>332</b>	<b>1</b>	<b>0</b>	<b>232</b>	<b>98</b>
8900 waste and scrap nec	332	1	0	232	98
<b>Total unknown or not elsewhere classified</b>	<b>136</b>	<b>135</b>	<b>0</b>	<b>0</b>	<b>—</b>
9900 unknown or nec	136	135	0	0	—

Table 2-3: DOMESTIC BARGE TRAFFIC BY TYPE OF TRAFFIC AND COMMODITY

## Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1988	740,893	1991	749,654	1994	782,014	1997	820,432
1989	743,196	1992	762,540	1995	786,560		
1990	776,146	1993	753,287	1996	802,275		

Freight Traffic, 1997  
(thousand short tons)

Commodity	Barge-Traffic						Domestic	
	Total	Coastwise	Lakewise	Internal	Intraport	Intra-Territory	%-Barge	Traffic
<b>Total, all commodities</b>	<b>820,432</b>	<b>113,766</b>	<b>10,770</b>	<b>605,797</b>	<b>85,198</b>	<b>4,901</b>	<b>73.7</b>	<b>1,112,527</b>
<b>Total coal</b>	<b>206,957</b>	<b>12,683</b>	<b>251</b>	<b>175,989</b>	<b>18,033</b>	<b>—</b>	<b>89.1</b>	<b>232,336</b>
1100 coal lignite	203,275	12,573	240	172,477	17,985	—	89.0	228,286
1200 coal coke	3,682	111	12	3,512	48	—	90.9	4,050
<b>Total petroleum and petroleum products</b>	<b>260,872</b>	<b>63,521</b>	<b>1,889</b>	<b>149,235</b>	<b>41,340</b>	<b>4,887</b>	<b>65.8</b>	<b>396,693</b>
<b>Subtotal crude petroleum</b>	<b>39,329</b>	<b>1,294</b>	<b>—</b>	<b>36,581</b>	<b>1,454</b>	<b>—</b>	<b>32.7</b>	<b>120,402</b>
2100 crude petroleum	39,329	1,294	—	36,581	1,454	—	32.7	120,402
<b>Subtotal petroleum products</b>	<b>221,543</b>	<b>62,227</b>	<b>1,889</b>	<b>112,654</b>	<b>39,886</b>	<b>4,887</b>	<b>80.2</b>	<b>276,292</b>
2211 gasoline	61,586	23,391	306	29,860	6,686	1,343	68.8	89,475
2221 kerosene	2,041	582	—	841	499	119	92.5	2,206
2330 distillate fuel oil	50,900	15,745	287	24,018	9,656	1,195	77.4	65,727
2340 residual fuel oil	67,535	17,711	163	29,074	18,386	2,201	88.1	76,672
2350 lube oil & greases	3,987	155	—	3,272	560	—	71.0	5,619
2410 petro. jelly & waxes	144	54	—	90	—	—	84.6	171
2429 naphtha & solvents	5,363	219	—	3,728	1,387	28	92.3	5,812
2430 asphalt, tar & pitch	14,389	3,362	1,013	9,087	927	—	98.4	14,620
2540 petroleum coke	9,302	366	120	7,693	1,123	—	98.4	9,448
2640 liquid natural gas	2,521	280	—	2,170	71	—	99.8	2,525
2990 petro. products nec	3,775	362	—	2,821	591	—	94.0	4,016
<b>Total chemicals and related products</b>	<b>68,084</b>	<b>6,339</b>	<b>131</b>	<b>51,391</b>	<b>10,223</b>	<b>—</b>	<b>84.0</b>	<b>81,029</b>
<b>Subtotal fertilizers</b>	<b>13,133</b>	<b>1,583</b>	<b>—</b>	<b>11,424</b>	<b>126</b>	<b>—</b>	<b>97.4</b>	<b>13,478</b>
3110 nitrogenous fert.	6,228	390	—	5,739	99	—	99.9	6,233
3120 phosphatic fert.	1,930	200	—	1,728	2	—	95.9	2,013
3130 potassic fert.	1,275	35	—	1,236	4	—	99.9	1,276
3190 fert. & mixes nec	3,699	958	—	2,720	21	—	93.5	3,956
<b>Subtotal other chemicals and related products</b>	<b>54,951</b>	<b>4,756</b>	<b>131</b>	<b>39,967</b>	<b>10,097</b>	<b>—</b>	<b>81.3</b>	<b>67,551</b>
3211 acyclic hydrocarbons	2,453	0	—	2,261	191	—	99.0	2,478
3212 benzene & toluene	6,141	23	—	4,055	2,063	—	95.5	6,431
3219 other hydrocarbons	11,886	787	—	9,059	2,040	—	85.2	13,954
3220 alcohols	7,165	122	—	5,557	1,487	—	92.1	7,776
3230 carboxylic acids	1,785	11	—	1,071	703	—	92.1	1,939
3240 nitrogen func. comp.	1,651	0	—	1,631	20	—	99.3	1,663
3250 organo-inorganic comp.	41	0	—	38	2	—	90.3	45
3260 organic comp. nec	1,175	1	—	1,134	40	—	85.9	1,367
3271 sulphur (liquid)	3,863	1,323	—	2,411	129	—	43.8	8,820
3272 sulphuric acid	1,791	16	—	1,422	353	—	99.9	1,793
3273 ammonia	2,577	91	—	2,463	23	—	91.5	2,815
3274 sodium hydroxide	7,010	1,610	—	4,757	643	—	93.6	7,488
3275 inorg. elem. oxides, & halogen salts	1,491	21	—	973	497	—	98.0	1,521
3276 metallic salts	1,211	51	131	947	83	—	98.5	1,229
3279 inorganic chem. nec	231	1	—	230	—	—	99.8	231
3281 radioactive material	0	0	—	—	—	—	5.4	1
3282 pigments & paints	13	9	—	3	—	—	27.8	46
3283 coloring mat. nec	1	1	—	—	—	—	36.0	2
3284 medicines	2	2	—	0	0	—	1.9	124
3285 perfumes & cleansers	26	24	—	2	—	—	16.2	163
3286 plastics	29	22	—	7	—	—	29.1	101
3291 pesticides	7	6	—	—	1	—	22.7	30
3292 starches, gluten, glue	4	4	—	—	—	—	25.5	16
3293 explosives	2	1	—	1	—	—	50.4	3
3297 chemical additives	3,811	517	—	1,589	1,705	—	57.2	6,666
3298 wood & resin chem.	120	23	—	97	—	—	54.5	220
3299 chem. products nec	465	90	—	258	117	—	74.0	628
<b>Total crude materials, inedible except fuels</b>	<b>150,143</b>	<b>17,503</b>	<b>6,947</b>	<b>115,655</b>	<b>10,028</b>	<b>9</b>	<b>60.9</b>	<b>246,504</b>
<b>Subtotal forest products, wood and chips</b>	<b>11,461</b>	<b>1,383</b>	<b>0</b>	<b>10,018</b>	<b>59</b>	<b>—</b>	<b>58.1</b>	<b>19,731</b>
4110 rubber & gums	8	6	—	2	—	—	91.8	9
4150 fuel wood	101	1	—	100	0	—	98.6	102
4161 wood chips	7,432	510	—	6,912	10	—	100.0	7,432
4170 wood in the rough	3,261	363	—	2,849	50	—	28.9	11,290
4189 lumber	610	492	0	118	0	—	81.9	745
4190 forest products nec	48	11	—	37	—	—	31.6	153
<b>Subtotal pulp and waste paper</b>	<b>199</b>	<b>37</b>	<b>—</b>	<b>161</b>	<b>—</b>	<b>—</b>	<b>81.9</b>	<b>242</b>
4225 pulp & waste paper	199	37	—	161	—	—	81.9	242
<b>Subtotal soil, sand, gravel, rock and stone</b>	<b>106,508</b>	<b>14,474</b>	<b>3,139</b>	<b>79,366</b>	<b>9,524</b>	<b>4</b>	<b>78.7</b>	<b>135,384</b>
4310 building stone	120	—	—	120	—	—	99.9	120
4322 limestone	30,126	786	2,993	26,327	21	—	52.6	57,230
4323 gypsum	712	6	—	706	—	—	40.3	1,766
4327 phosphate rock	6,262	6,103	—	159	—	—	100.0	6,262

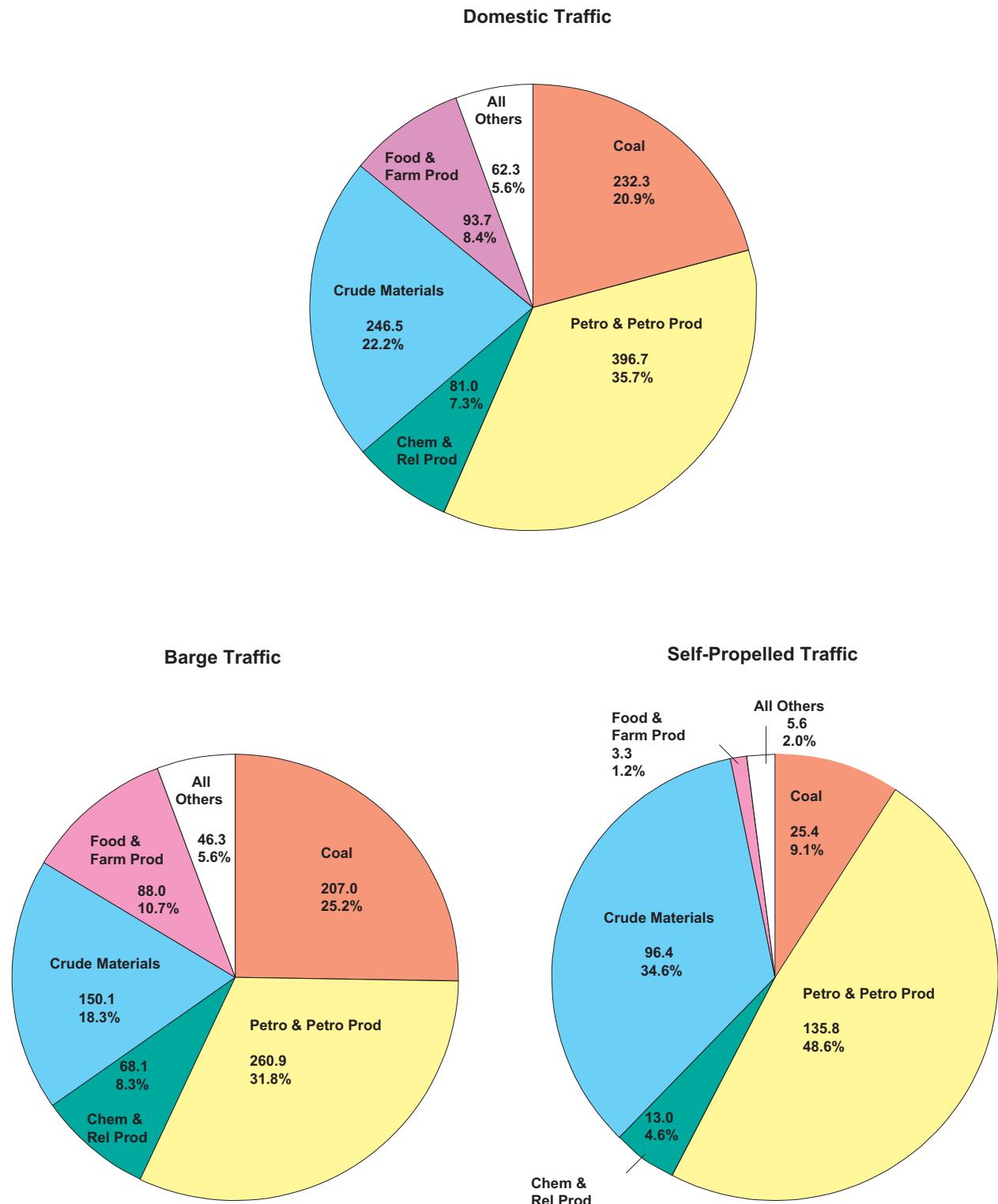
**Table 2-3: DOMESTIC BARGE TRAFFIC BY TYPE OF TRAFFIC AND COMMODITY**  
 Freight Traffic, 1997 - continued  
 (thousand short tons)

Commodity	Total	Barge-Traffic					Domestic	
		Coastwise	Lakewise	Internal	Intraport	Intra-Territory	%-Barge	Traffic
4331 sand & gravel	69,244	7,572	146	52,019	9,502	4	99.0	69,956
4338 soil & fill dirt	43	8	—	35	1	—	89.8	48
<b>Subtotal iron ore and scrap</b>	<b>14,215</b>	<b>956</b>	<b>3,451</b>	<b>9,422</b>	<b>386</b>	<b>—</b>	<b>20.0</b>	<b>71,058</b>
4410 iron ore	7,803	7	3,449	4,336	11	—	12.1	64,391
4420 iron & steel scrap	6,412	949	2	5,086	375	—	96.2	6,667
<b>Subtotal marine shells</b>	<b>546</b>	<b>0</b>	<b>—</b>	<b>546</b>	<b>—</b>	<b>—</b>	<b>94.0</b>	<b>581</b>
4515 marine shells	546	0	—	546	—	—	94.0	581
<b>Subtotal non-ferrous ores and scrap</b>	<b>5,246</b>	<b>40</b>	<b>—</b>	<b>5,195</b>	<b>10</b>	<b>—</b>	<b>99.9</b>	<b>5,252</b>
4630 copper ore	16	0	—	16	—	—	99.1	16
4650 aluminum ore	3,274	18	—	3,255	—	—	100.0	3,274
4670 manganese ore	578	—	—	568	10	—	100.0	578
4680 non-ferrous scrap	28	0	—	27	—	—	82.6	33
4690 non-ferrous ores nec	1,351	22	—	1,329	—	—	100.0	1,351
<b>Subtotal sulphur, clay and salt</b>	<b>796</b>	<b>134</b>	<b>—</b>	<b>654</b>	<b>4</b>	<b>4</b>	<b>53.9</b>	<b>1,477</b>
4741 sulphur, (dry)	4	0	—	—	—	4	100.0	4
4782 clay & refrac. mat.	792	134	—	654	4	—	53.8	1,473
<b>Subtotal slag</b>	<b>1,429</b>	<b>65</b>	<b>358</b>	<b>1,007</b>	<b>—</b>	<b>—</b>	<b>79.4</b>	<b>1,800</b>
4860 slag	1,429	65	358	1,007	—	—	79.4	1,800
<b>Subtotal other non-metal. min.</b>	<b>9,744</b>	<b>414</b>	<b>—</b>	<b>9,286</b>	<b>44</b>	<b>—</b>	<b>88.7</b>	<b>10,979</b>
4900 non-metal. min. nec	9,744	414	—	9,286	44	—	88.7	10,979
<b>Total primary manufactured goods</b>	<b>33,883</b>	<b>6,549</b>	<b>1,550</b>	<b>24,928</b>	<b>855</b>	<b>—</b>	<b>91.1</b>	<b>37,178</b>
<b>Subtotal paper products</b>	<b>953</b>	<b>124</b>	<b>—</b>	<b>825</b>	<b>4</b>	<b>—</b>	<b>66.9</b>	<b>1,425</b>
5110 newsprint	62	2	—	60	—	—	87.0	71
5120 paper & paperboard	683	13	—	666	4	—	65.7	1,040
5190 paper products nec	208	108	—	100	—	—	66.2	314
<b>Subtotal lime, cement and glass</b>	<b>13,368</b>	<b>2,642</b>	<b>1,180</b>	<b>8,841</b>	<b>705</b>	<b>—</b>	<b>85.2</b>	<b>15,686</b>
5210 lime	2,456	0	—	2,456	—	—	100.0	2,456
5220 cement & concrete	10,548	2,545	1,179	6,119	705	—	82.9	12,721
5240 glass & glass prod.	86	28	—	59	—	—	70.8	122
5290 misc. mineral prod.	278	70	0	207	1	—	71.9	386
<b>Subtotal primary iron and steel products</b>	<b>14,204</b>	<b>104</b>	<b>371</b>	<b>13,590</b>	<b>138</b>	<b>—</b>	<b>98.6</b>	<b>14,409</b>
5312 pig iron	3,288	—	10	3,269	8	—	100.0	3,288
5315 ferro alloys	1,012	—	—	985	27	—	100.0	1,012
5320 i&s primary forms	1,589	32	—	1,552	4	—	99.9	1,591
5330 i&s plates & sheets	5,026	1	360	4,624	40	—	99.9	5,030
5360 i&s bars & shapes	1,011	13	—	995	3	—	96.3	1,050
5370 i&s pipe & tube	1,081	20	0	1,022	39	—	87.7	1,233
5390 primary i&s nec	1,197	38	—	1,142	16	—	99.4	1,204
<b>Subtotal primary non-ferrous metal products</b>	<b>5,143</b>	<b>3,603</b>	<b>0</b>	<b>1,532</b>	<b>8</b>	<b>—</b>	<b>95.2</b>	<b>5,404</b>
5421 copper	14	1	—	12	2	—	69.5	20
5422 aluminum	191	3	—	187	—	—	92.8	205
5429 smelted prod. nec	124	6	—	118	—	—	95.6	130
5480 fab. metal products	4,815	3,593	0	1,215	6	—	95.4	5,049
<b>Subtotal primary wood products</b>	<b>215</b>	<b>75</b>	<b>—</b>	<b>140</b>	<b>—</b>	<b>—</b>	<b>84.4</b>	<b>254</b>
<b>Total food and farm products</b>	<b>88,036</b>	<b>3,402</b>	<b>—</b>	<b>84,326</b>	<b>307</b>	<b>—</b>	<b>94.0</b>	<b>93,654</b>
<b>Subtotal fish</b>	<b>9</b>	<b>9</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>8.0</b>	<b>118</b>
6134 fish (not shellfish)	9	9	—	—	—	—	10.1	93
6136 shellfish	0	0	—	—	—	—	0.4	25
<b>Subtotal grain</b>	<b>48,536</b>	<b>593</b>	<b>—</b>	<b>47,887</b>	<b>56</b>	<b>—</b>	<b>98.9</b>	<b>49,063</b>
6241 wheat	11,992	224	—	11,755	13	—	96.4	12,438
6344 corn	33,095	297	—	32,768	30	—	100.0	33,096
6443 rice	1,271	70	—	1,201	—	—	95.5	1,331
6443 barley & rye	553	1	—	549	3	—	100.0	553
6445 oats	154	1	—	149	3	—	88.5	174
6447 sorghum grains	1,472	—	—	1,465	7	—	100.0	1,472
<b>Subtotal oilseeds</b>	<b>25,811</b>	<b>67</b>	<b>—</b>	<b>25,712</b>	<b>33</b>	<b>—</b>	<b>99.9</b>	<b>25,828</b>
6521 peanuts	0	0	—	—	—	—	2.4	6
6522 soybeans	21,495	20	—	21,450	25	—	100.0	21,495
6590 oilseeds nec	4,316	47	—	4,262	8	—	99.8	4,327
<b>Subtotal vegetable products</b>	<b>1,331</b>	<b>97</b>	<b>—</b>	<b>1,219</b>	<b>14</b>	<b>—</b>	<b>81.6</b>	<b>1,630</b>
6653 vegetable oils	1,243	49	—	1,180	14	—	99.4	1,251
6654 vegetables & prod.	88	49	—	39	—	—	23.1	379
<b>Subtotal processed grain and animal feed</b>	<b>8,566</b>	<b>495</b>	<b>—</b>	<b>7,958</b>	<b>113</b>	<b>—</b>	<b>98.0</b>	<b>8,738</b>
6746 wheat flour	48	8	—	41	—	—	57.4	85
6747 grain mill products	666	300	—	356	10	—	95.0	701
6781 hay & fodder	40	8	—	32	—	—	85.8	47
6782 animal feed, prep.	7,811	179	—	7,529	103	—	98.8	7,905
<b>Subtotal other agricultural products</b>	<b>3,783</b>	<b>2,141</b>	<b>—</b>	<b>1,550</b>	<b>92</b>	<b>—</b>	<b>45.7</b>	<b>8,278</b>
6811 meat, fresh, frozen	70	69	—	0	—	—	28.4	245
6817 meat, prepared	7	7	—	—	—	—	9.0	74
6822 dairy products	47	47	—	—	—	—	46.7	100
6835 fish, prepared	26	7	—	20	—	—	64.3	41
6838 tallow, animal oils	17	4	—	12	1	—	94.6	18
6839 animals & prod. nec	53	35	—	18	—	—	7.3	723

Table 2-3: DOMESTIC BARGE TRAFFIC BY TYPE OF TRAFFIC AND COMMODITY  
 Freight Traffic, 1997 - continued  
 (thousand short tons)

Commodity	Total	Barge-Traffic					Domestic	
		Coastwise	Lakewise	Internal	Intraport	Intra-Territory	%-Barge	Traffic
6856 bananas & plantains	0	0	—	—	—	—	1.3	13
6857 fruit & nuts nec	4	4	—	—	—	—	1.1	386
6858 fruit juices	109	109	—	0	—	—	39.3	276
6861 sugar	1,582	1,004	—	578	—	—	83.3	1,900
6865 molasses	560	112	—	391	58	—	81.5	687
6871 coffee	3	3	—	—	—	—	16.8	17
6885 alcoholic beverages	274	76	—	197	—	—	35.6	768
6887 groceries	315	293	—	21	1	—	40.9	771
6888 water & ice	108	3	—	82	23	—	10.4	1,030
6889 food products nec	564	344	—	211	9	—	53.0	1,065
6891 tobacco & products	12	12	—	—	—	—	39.6	31
6893 cotton	2	1	—	1	—	—	79.6	3
6899 farm products nec	29	10	—	19	—	—	25.9	112
<b>Total all manufactured equipment, machinery and products</b>	<b>6,928</b>	<b>3,765</b>	<b>1</b>	<b>2,979</b>	<b>178</b>	<b>6</b>	<b>35.5</b>	<b>19,503</b>
7110 machinery (not elec)	329	92	1	227	9	—	3.5	9,270
7120 electrical machinery	78	65	—	13	—	—	39.7	195
7210 vehicles & parts	796	771	0	19	0	6	69.3	1,149
7220 aircraft & parts	0	0	—	0	—	—	15.3	2
7230 ships & boats	7	3	—	3	2	—	69.4	11
7300 ordnance & access.	1	1	—	—	—	—	33.2	3
7400 manufac. wood prod.	102	45	—	56	0	—	60.1	170
7500 textile products	72	27	—	45	—	—	30.6	234
7600 rubber & plastic pr.	134	28	—	106	—	—	66.7	201
7800 empty containers	411	5	—	406	0	—	99.9	412
7900 manufac. prod. nec	4,998	2,727	0	2,104	167	—	63.6	7,857
<b>Total waste and scrap nec</b>	<b>5,528</b>	<b>1</b>	<b>0</b>	<b>1,294</b>	<b>4,234</b>	<b>—</b>	<b>99.7</b>	<b>5,545</b>
8900 waste and scrap nec	5,528	1	0	1,294	4,234	—	99.7	5,545
<b>Total unknown or not elsewhere classified</b>	<b>2</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2.3</b>	<b>83</b>
9900 unknown or nec	2	2	—	—	—	—	2.3	83

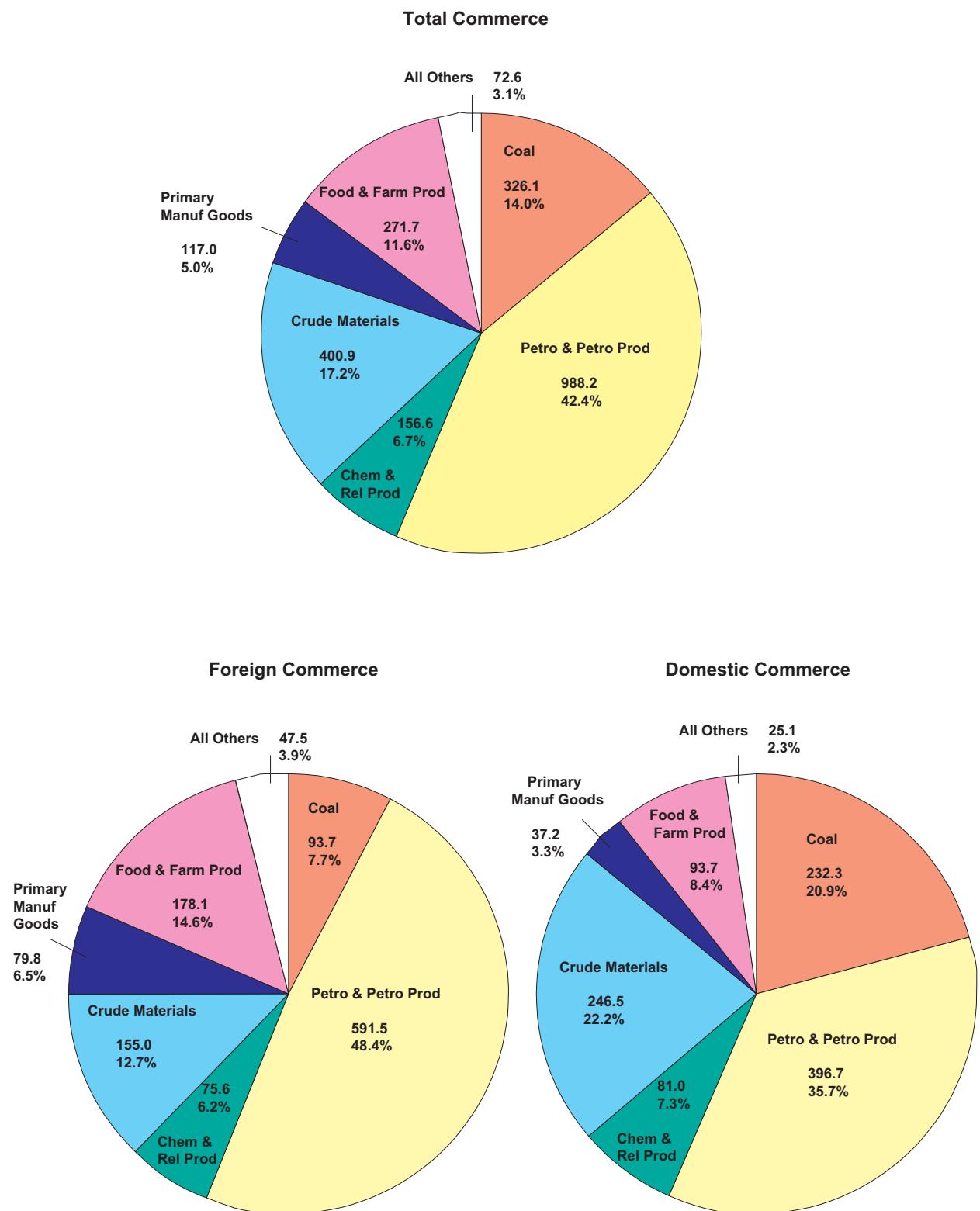
*Figure 2-1*  
**DOMESTIC COMMERCE, 1997**  
 COMPARED BY MAJOR COMMODITY GROUPS  
 BARGE AND SELF-PROPELLED VESSEL TRAFFIC  
 (million short tons and percentage of short tons)



*Table 2-4: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997  
(million short tons)*

	1996	1997	%Change
<b>Total Commerce</b>	<b>2,284.1</b>	<b>2,333.1</b>	<b>2.1</b>
Coal	328.7	326.0	-0.8
Petro & Petro Prod	954.4	988.2	3.5
Chem & Rel Prod	152.3	156.6	2.9
Crude Materials	388.7	400.9	3.2
Primary Manuf Goods	108.9	117.0	7.4
Food and Farm Prod	284.9	271.7	-4.6
All Manuf Equip	59.0	66.1	12.0
Other	7.2	6.6	-8.6
 <b>Foreign Commerce</b>	 <b>1,183.4</b>	 <b>1,220.6</b>	 <b>3.1</b>
Coal	98.8	93.7	-5.2
Petro & Petro Prod	556.0	591.5	6.4
Chem & Rel Prod	72.1	75.6	4.9
Crude Materials	155.4	155.0	-0.3
Primary Manuf Goods	71.2	79.8	12.0
Food and Farm Prod	186.9	178.1	-4.7
All Manuf Equip	41.8	46.6	11.3
Other	1.1	0.9	-16.5
 <b>Domestic Commerce</b>	 <b>1,100.7</b>	 <b>1,112.5</b>	 <b>1.1</b>
Coal	229.9	232.3	1.1
Petro & Petro Prod	398.5	396.7	-0.4
Chem & Rel Prod	80.2	81.0	1.0
Crude Materials	233.2	246.5	5.7
Primary Manuf Goods	37.7	37.2	-1.4
Food and Farm Prod	98.0	93.7	-4.4
All Manuf Equip	17.2	19.5	13.7
Other	6.1	5.6	-7.1

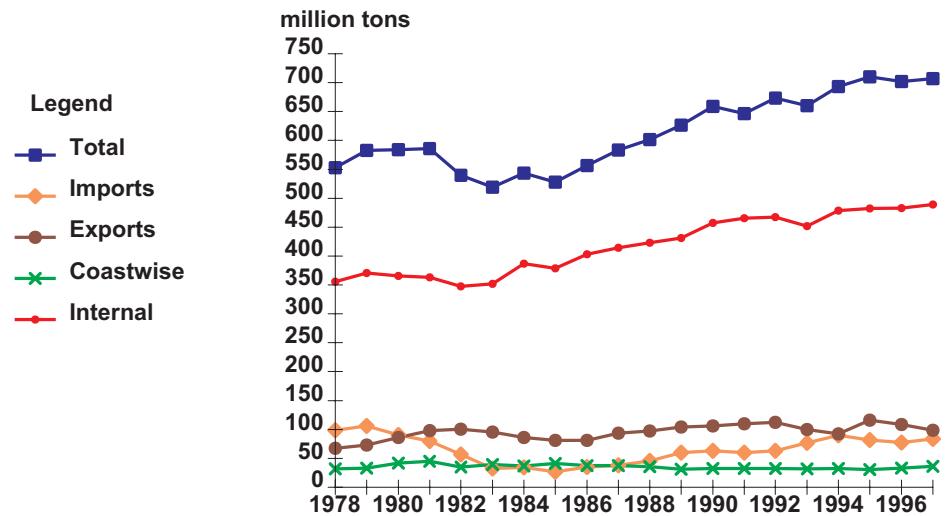
*Figure 2-2*  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997  
 (million short tons and percentage of short tons)



## **Section 3**

### **Waterways**

*Figure 3-1*  
 MISSISSIPPI RIVER SYSTEM, 1978-1997  
 BY TYPE OF TRAFFIC  
 (million short tons)



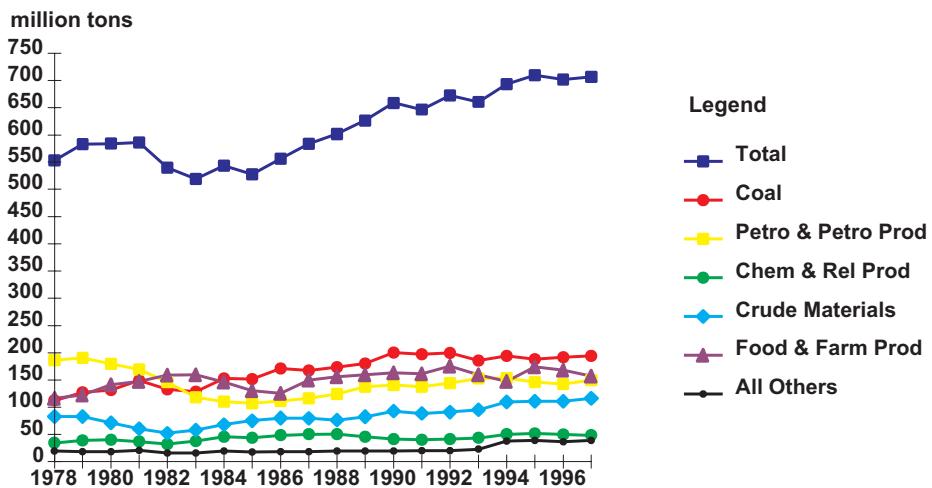
*Table 3-1: MISSISSIPPI RIVER SYSTEM, 1978-1997*  
 BY TYPE OF TRAFFIC\*  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>552.9</b>	<b>582.9</b>	<b>584.2</b>	<b>586.0</b>	<b>539.6</b>	<b>519.1</b>	<b>543.5</b>	<b>527.8</b>	<b>556.4</b>	<b>583.4</b>
Imports	98.6	105.9	90.8	80.1	56.7	32.3	34.1	27.0	35.1	38.1
Exports	67.3	73.3	86.3	98.3	100.8	95.8	85.9	81.0	81.1	93.7
Coastwise	31.7	33.1	41.6	44.7	34.7	39.1	36.7	40.9	37.4	37.4
Internal	355.4	370.8	365.6	362.9	347.5	352.0	386.6	378.9	402.8	414.2

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>601.6</b>	<b>626.4</b>	<b>659.1</b>	<b>646.6</b>	<b>673.1</b>	<b>660.4</b>	<b>693.3</b>	<b>707.2</b>	<b>701.8</b>	<b>707.1</b>
Imports	45.3	59.9	63.1	60.1	63.0	76.9	89.8	81.5	77.3	83.5
Exports	97.5	104.0	106.0	109.9	112.3	100.0	92.4	115.8	108.7	98.5
Coastwise	35.8	31.1	32.6	31.3	32.3	31.8	32.4	30.6	33.0	36.3
Internal	423.0	431.5	457.5	445.1	465.4	451.7	478.7	479.4	482.8	488.9

\*Imports include Upbound Thru Traffic. Exports include Downbound Thru Traffic.

*Figure 3-2*  
 MISSISSIPPI RIVER SYSTEM, 1978-1997  
 ALL TRAFFIC BY COMMODITY GROUP  
 (million short tons)

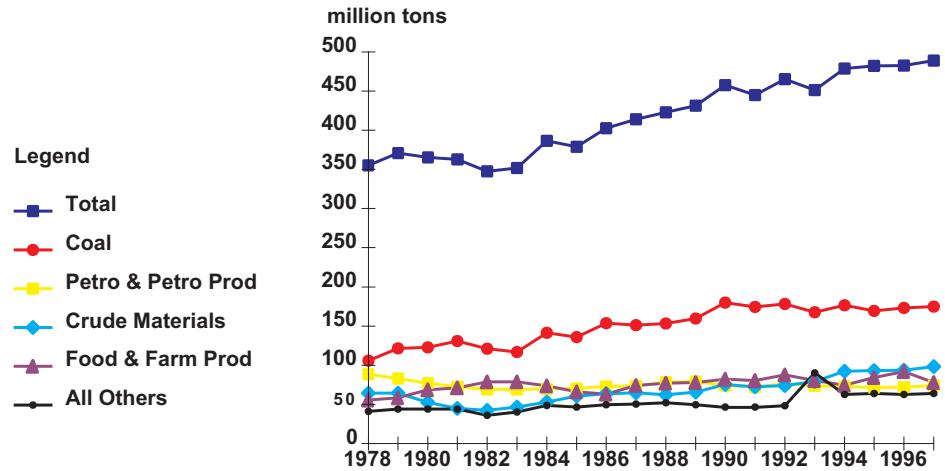


*Table 3-2: MISSISSIPPI RIVER SYSTEM, 1978-1997*  
 ALL TRAFFIC BY COMMODITY GROUP  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>552.9</b>	<b>582.9</b>	<b>584.2</b>	<b>586.0</b>	<b>539.6</b>	<b>519.1</b>	<b>543.5</b>	<b>527.8</b>	<b>556.4</b>	<b>583.4</b>
Coal	112.4	127.9	131.8	149.6	133.1	129.0	153.0	152.0	171.1	167.9
Petro & Petro Prod	186.8	191.0	179.6	169.8	146.4	118.7	110.5	107.6	112.1	116.9
Chem & Rel Prod	34.4	39.1	40.3	37.3	32.7	37.8	45.7	44.4	48.6	50.6
Crude Materials	83.6	83.4	72.0	61.0	52.4	58.3	68.2	75.6	80.0	79.5
Primary Manuf Goods	16.9	17.4	15.8	17.2	13.4	14.2	18.6	16.5	17.5	17.1
Food & Farm Prod	116.5	122.5	141.6	147.9	159.4	159.8	146.5	130.6	125.8	150.4
All Manuf Equip	1.1	1.1	1.1	1.2	0.8	0.7	0.6	0.7	0.8	0.6
Other	1.2	0.5	2.0	2.1	1.5	0.7	0.4	0.4	0.3	0.4

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>601.6</b>	<b>626.4</b>	<b>659.1</b>	<b>646.6</b>	<b>673.1</b>	<b>660.4</b>	<b>693.3</b>	<b>707.2</b>	<b>701.8</b>	<b>707.1</b>
Coal	173.8	180.3	200.8	197.5	199.7	186.1	194.2	188.1	192.3	194.2
Petro & Petro Prod	124.4	138.2	140.9	137.9	144.6	153.0	153.6	146.2	143.0	150.3
Chem & Rel Prod	50.8	45.8	41.8	40.0	42.0	43.5	50.3	51.4	49.9	48.9
Crude Materials	76.6	82.6	92.8	89.0	91.1	95.4	109.7	108.3	111.0	116.6
Primary Manuf Goods	18.3	18.1	18.3	19.4	18.9	21.6	36.5	37.3	34.6	36.7
Food & Farm Prod	156.4	160.1	163.4	161.9	175.7	159.6	147.7	174.5	168.3	157.6
All Manuf Equip	0.8	1.1	1.0	0.8	0.9	1.1	1.1	1.2	2.5	2.5
Other	0.4	0.4	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3

*Figure 3-3*  
 MISSISSIPPI RIVER SYSTEM, 1978-1997  
 INTERNAL TRAFFIC BY COMMODITY GROUP  
 (million short tons)



*Table 3-3: MISSISSIPPI RIVER SYSTEM, 1978-1997  
 INTERNAL TRAFFIC BY COMMODITY GROUP  
 (million short tons)*

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>355.4</b>	<b>370.8</b>	<b>365.6</b>	<b>362.9</b>	<b>347.5</b>	<b>352.0</b>	<b>386.6</b>	<b>378.9</b>	<b>402.8</b>	<b>414.2</b>
Coal	106.0	121.4	123.0	130.6	121.2	117.0	141.3	135.8	153.6	151.1
Petro & Petro Prod	88.4	82.8	77.3	72.3	69.1	69.1	70.0	70.1	72.7	73.8
Chem & Rel Prod	27.6	30.5	30.3	28.6	24.4	28.5	34.3	33.4	35.7	36.7
Crude Materials	64.2	64.2	52.6	44.9	42.3	46.7	52.9	60.7	63.7	65.0
Primary Manuf Goods	11.8	12.7	11.3	12.6	9.8	10.8	13.7	12.4	13.0	13.1
Food & Farm Prod	55.6	58.3	68.6	71.2	78.9	78.9	73.7	65.9	63.2	73.9
All Manuf Equip	0.5	0.5	0.5	0.6	0.4	0.3	0.4	0.3	0.5	0.3
Other	1.2	0.4	2.0	2.1	1.4	0.6	0.3	0.3	0.3	0.3

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>423.0</b>	<b>431.5</b>	<b>457.5</b>	<b>445.1</b>	<b>465.4</b>	<b>451.7</b>	<b>478.7</b>	<b>479.4</b>	<b>482.8</b>	<b>488.9</b>
Coal	153.3	159.4	180.1	174.3	178.4	167.8	176.7	169.4	173.3	174.9
Petro & Petro Prod	78.2	79.0	74.1	72.0	76.7	73.7	72.6	71.7	71.9	74.0
Chem & Rel Prod	37.7	34.6	31.1	30.7	33.2	34.4	38.7	39.0	37.8	38.1
Crude Materials	62.3	65.7	75.2	72.5	74.2	79.1	92.4	90.5	93.4	98.2
Primary Manuf Goods	13.6	13.9	14.3	14.8	14.5	15.5	22.9	23.8	22.3	23.4
Food & Farm Prod	77.1	77.9	82.0	80.3	87.7	80.4	74.5	84.1	81.7	77.9
All Manuf Equip	0.5	0.7	0.6	0.5	0.5	0.7	0.7	0.8	2.1	2.2
Other	0.3	0.3	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2

*Table 3-4: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997  
FOR THE MISSISSIPPI RIVER SYSTEM  
(million short tons)*

	1996	1997	%Change
<b>Foreign Commerce</b>	<b>186.0</b>	<b>181.9</b>	<b>-2.2</b>
Coal	10.4	9.3	-10.4
Petro & Petro Prod	56.9	60.8	6.7
Chem & Rel Prod	8.0	6.8	-15.4
Crude Materials	12.4	12.6	1.5
Primary Manuf Goods	12.2	13.3	8.8
Food & Farm Prod	85.7	78.8	-8.0
Other	0.4	0.4	3.5
<b>Coastwise Traffic</b>	<b>33.0</b>	<b>36.3</b>	<b>9.9</b>
Coal	8.5	10.0	16.7
Petro & Petro Prod	14.2	15.5	9.1
Chem & Rel Prod	4.1	4.0	-2.8
Crude Materials	5.2	5.9	12.2
Primary Manuf Goods	0.0	0.1	155.3
Food & Farm Prod	0.9	0.9	-3.9
Other	-	0.0	-
<b>Internal Traffic</b>	<b>482.8</b>	<b>488.9</b>	<b>1.3</b>
Coal	173.3	174.9	0.9
Petro & Petro Prod	71.9	74.0	3.0
Chem & Rel Prod	37.8	38.1	0.8
Crude Materials	93.4	98.2	5.2
Primary Manuf Goods	22.3	23.4	4.6
Food & Farm Prod	81.7	77.9	-4.7
Other	2.4	2.4	1.1

*Figure 3-4*  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997  
 FOR THE MISSISSIPPI RIVER SYSTEM  
 (million short tons and percentage of short tons)

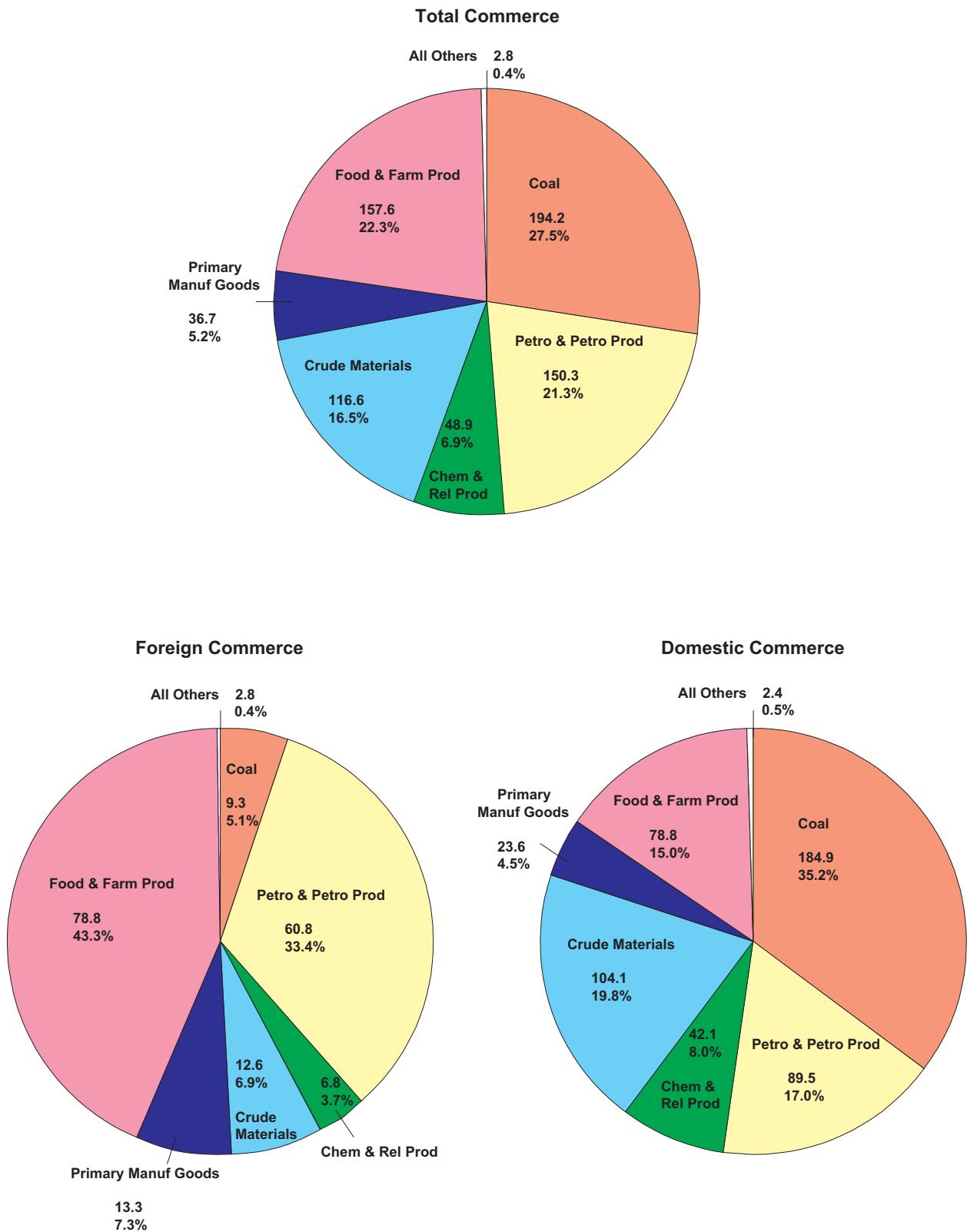


Figure 3-5  
MISSISSIPPI RIVER MAIN STEM, 1978-1997  
BY TYPE OF TRAFFIC  
(million short tons)

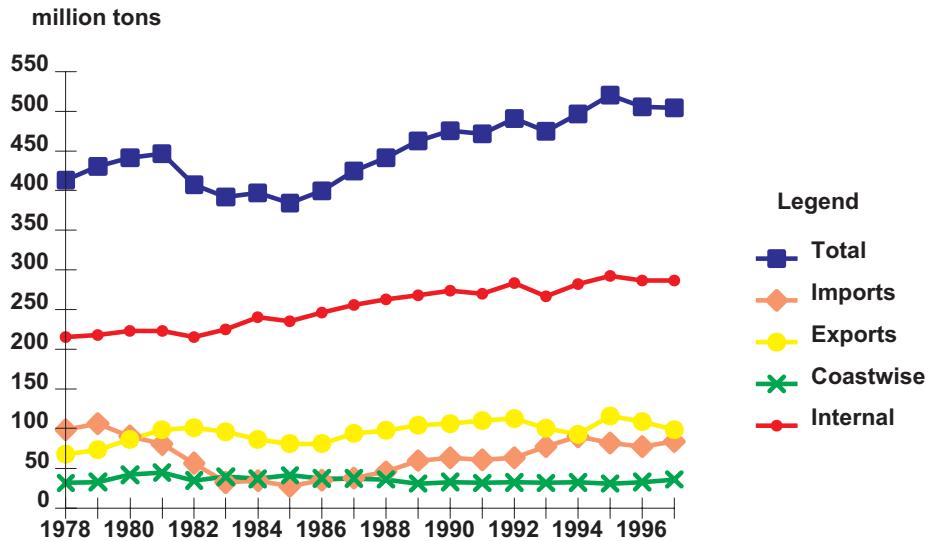


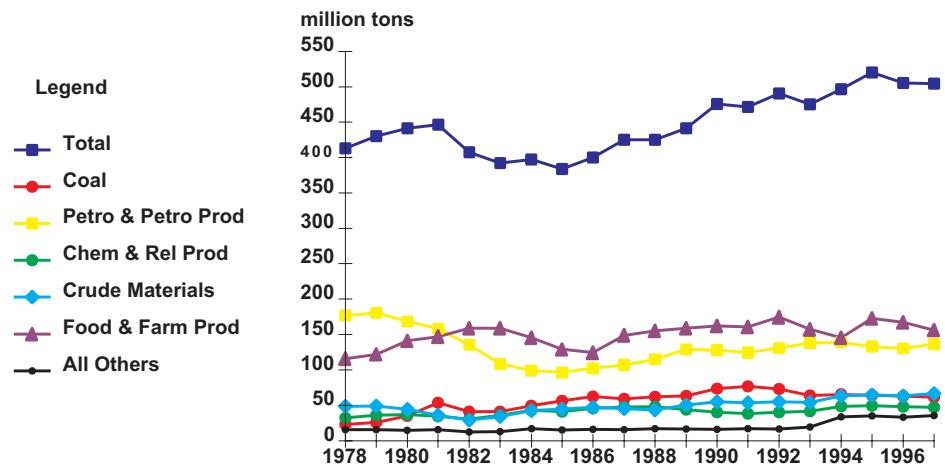
Table 3-5: MISSISSIPPI RIVER MAIN STEM, 1978-1997  
BY TYPE OF TRAFFIC\*  
(million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>413.1</b>	<b>430.2</b>	<b>441.5</b>	<b>446.4</b>	<b>407.6</b>	<b>392.1</b>	<b>397.3</b>	<b>384.0</b>	<b>399.9</b>	<b>425.0</b>
Imports	98.6	105.9	90.8	80.1	56.7	32.3	34.1	27.0	35.1	38.1
Exports	67.3	73.3	86.3	98.3	100.8	95.8	85.9	81.0	81.1	93.7
Coastwise	31.7	33.1	41.6	44.7	34.7	39.1	36.9	40.9	37.4	37.4
Internal	215.5	218.0	222.9	223.3	215.4	225.0	240.4	235.0	246.3	255.8

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>441.5</b>	<b>462.7</b>	<b>475.3</b>	<b>471.7</b>	<b>491.0</b>	<b>475.1</b>	<b>496.8</b>	<b>520.3</b>	<b>505.6</b>	<b>504.7</b>
Imports	45.3	59.9	63.1	60.1	63.0	76.9	89.8	81.5	77.3	83.5
Exports	97.5	104.0	106.0	109.9	112.3	100.0	92.4	115.8	108.7	98.5
Coastwise	35.8	31.1	32.6	31.3	32.4	31.8	32.4	30.6	33.0	36.3
Internal	262.9	267.8	273.6	270.3	283.3	266.5	282.2	292.4	286.5	286.5

\*Imports include Upbound Thru Traffic. Exports include Downbound Thru Traffic.

*Figure 3-6*  
 MISSISSIPPI RIVER MAIN STEM, 1978-1997  
 BY COMMODITY GROUP  
 (million short tons)



*Table 3-6: MISSISSIPPI RIVER MAIN STEM, 1978-1997*  
 BY COMMODITY GROUP  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>413.1</b>	<b>430.2</b>	<b>441.5</b>	<b>446.4</b>	<b>407.6</b>	<b>392.1</b>	<b>397.3</b>	<b>384.0</b>	<b>399.9</b>	<b>425.0</b>
Coal	23.0	26.1	35.2	53.9	41.1	41.2	49.7	56.8	62.9	59.3
Petro & Petro Prod	176.9	180.5	168.3	158.2	135.4	108.8	99.2	96.7	102.6	107.3
Chem & Rel Prod	32.5	36.1	37.3	34.8	30.9	36.0	43.0	41.1	46.2	47.9
Crude Materials	48.6	49.3	44.7	36.4	29.2	34.2	42.7	44.9	47.4	45.7
Primary Manuf Goods	14.7	14.8	13.5	14.4	11.5	12.1	16.3	14.3	15.3	14.8
Food & Farm Prod	116.1	122.2	141.2	147.3	158.6	158.8	145.6	129.1	124.4	149.0
All Manuf Equip	1.0	1.0	1.0	1.1	0.7	0.6	0.6	0.7	0.8	0.6
Other	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>441.5</b>	<b>462.7</b>	<b>475.3</b>	<b>471.7</b>	<b>491.0</b>	<b>475.1</b>	<b>496.8</b>	<b>520.3</b>	<b>505.6</b>	<b>504.7</b>
Coal	62.3	63.7	73.7	77.2	73.1	64.1	65.4	64.6	63.3	61.7
Petro & Petro Prod	115.3	128.8	127.7	124.4	130.8	138.4	139.4	133.0	130.2	136.6
Chem & Rel Prod	48.3	44.0	40.3	38.4	40.4	41.6	48.6	49.7	48.4	47.2
Crude Materials	43.7	50.4	55.1	53.8	55.5	54.3	63.5	65.0	63.5	66.8
Primary Manuf Goods	15.8	15.4	15.3	16.4	15.7	18.3	32.9	34.0	31.0	33.5
Food & Farm Prod	155.1	158.8	162.1	160.6	174.4	157.4	145.9	172.8	167.0	156.5
All Manuf Equip	0.8	1.1	1.0	0.8	0.9	1.0	0.9	1.0	2.0	2.2
Other	0.4	0.4	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3

**Table 3-7: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997  
FOR THE MISSISSIPPI RIVER MAIN STEM  
(million short tons)**

	1996	1997	%Change
<b>Total Commerce</b>	<b>505.6</b>	<b>504.7</b>	<b>-0.2</b>
Coal	63.3	61.7	-2.5
Petro & Petro Prod	130.2	136.6	4.9
Chem & Rel Prod	48.4	47.2	-2.3
Crude Materials	63.5	66.8	5.2
Primary Manuf Goods	31.0	33.5	8.1
Food & Farm Prod	167.0	156.5	-6.3
Other	2.3	2.5	8.6
 <b>Foreign Commerce</b>	 <b>186.0</b>	 <b>181.9</b>	 <b>-2.2</b>
Coal	10.4	9.3	-10.4
Petro & Petro Prod	56.9	60.8	6.7
Chem & Rel Prod	8.0	6.8	-15.4
Crude Materials	12.4	12.6	1.5
Primary Manuf Goods	12.2	13.3	8.8
Food & Farm Prod	85.7	78.8	-8.0
Other	0.4	0.4	3.5
 <b>Domestic Commerce</b>	 <b>319.6</b>	 <b>322.8</b>	 <b>1.0</b>
Coal	52.9	52.4	-0.1
Petro & Petro Prod	73.3	75.8	3.5
Chem & Rel Prod	40.3	40.5	0.3
Crude Materials	51.1	54.2	6.0
Primary Manuf Goods	18.8	20.2	7.6
Food & Farm Prod	81.3	77.7	-4.5
Other	1.9	2.1	9.6

*Figure 3-7*  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997  
 FOR THE MISSISSIPPI RIVER MAIN STEM  
 (million short tons and percentage of short tons)

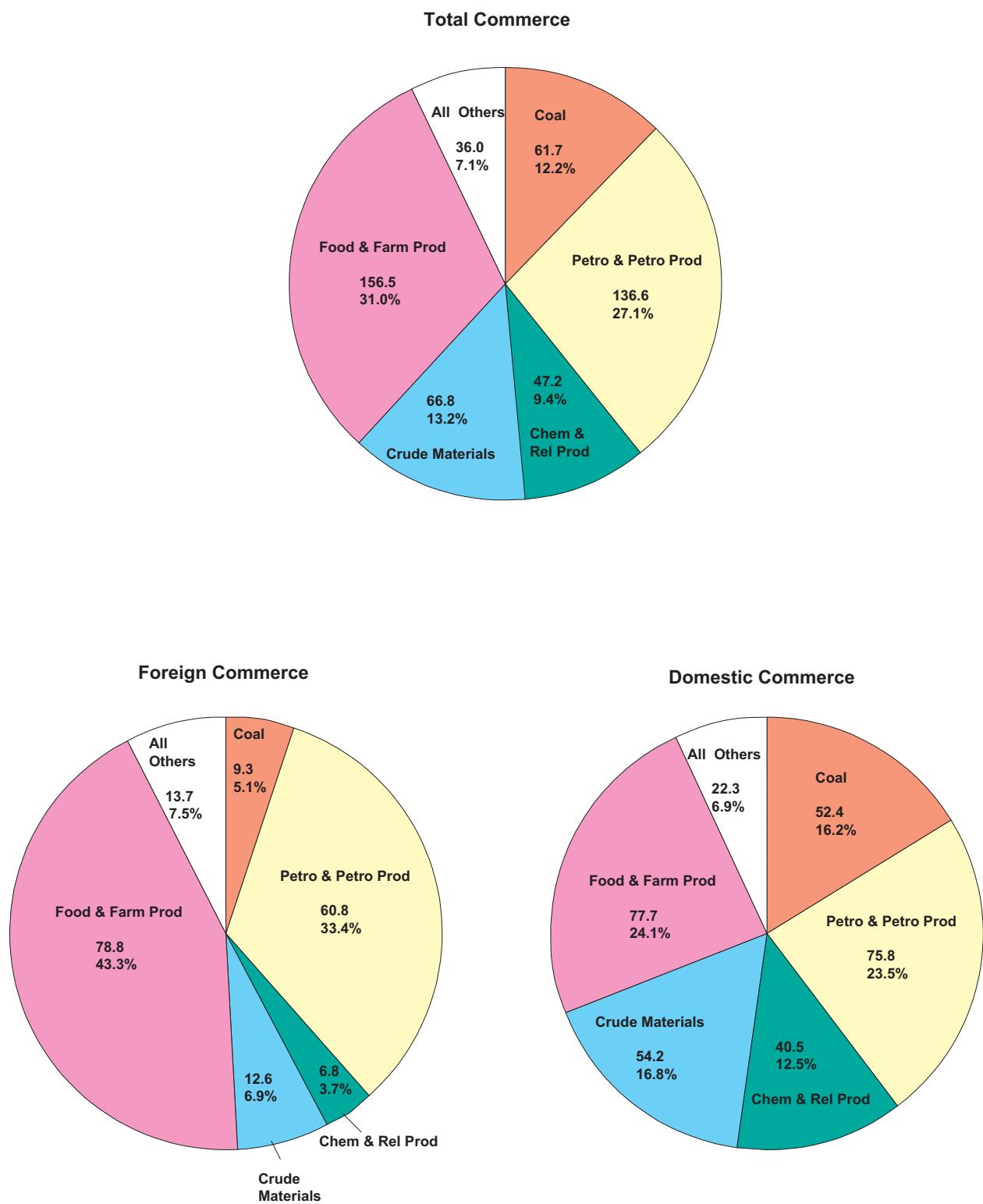


Figure 3-8  
OHIO RIVER SYSTEM, 1978-1997  
BY COMMODITY GROUP  
(million short tons)

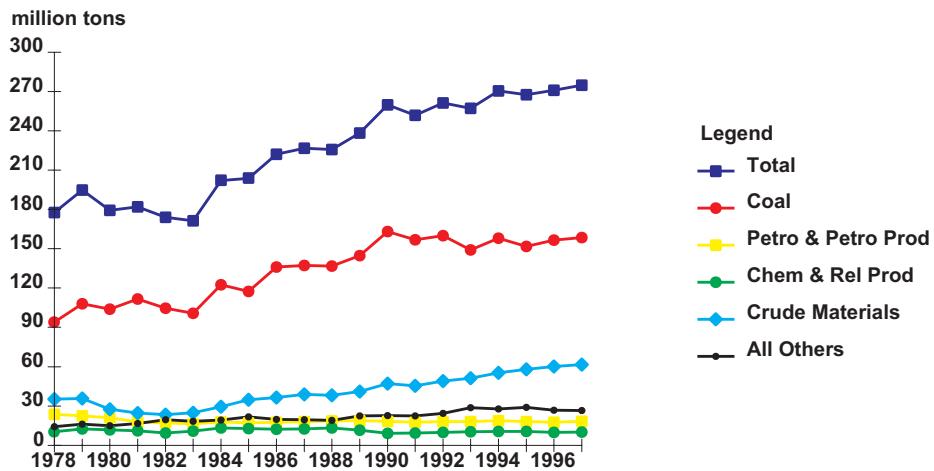


Table 3-8: OHIO RIVER SYSTEM, 1978-1997  
BY COMMODITY GROUP  
(million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>177.6</b>	<b>194.8</b>	<b>179.3</b>	<b>181.9</b>	<b>174.0</b>	<b>171.2</b>	<b>202.2</b>	<b>203.9</b>	<b>222.2</b>	<b>226.7</b>
Coal	94.0	108.0	103.8	111.6	104.6	100.7	122.5	117.3	135.9	137.3
Petro & Petro Prod	23.6	22.4	21.1	17.9	17.1	16.5	17.9	17.1	17.6	18.2
Chem & Rel Prod	10.5	12.5	11.9	11.1	9.3	10.9	13.2	12.9	12.4	12.6
Crude Materials	35.3	35.7	27.5	24.7	23.4	24.8	29.4	34.9	36.4	39.0
Primary Manuf Goods	5.9	6.8	5.4	6.1	4.7	5.3	6.6	6.2	6.1	6.1
Food & Farm Prod	8.1	9.3	9.4	10.3	14.8	13.0	12.5	15.4	13.8	13.5
Other	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>225.9</b>	<b>238.4</b>	<b>260.0</b>	<b>251.9</b>	<b>261.4</b>	<b>257.3</b>	<b>270.5</b>	<b>267.6</b>	<b>270.9</b>	<b>274.9</b>
Coal	136.7	144.6	163.0	156.8	159.8	149.0	157.9	151.7	156.5	158.4
Petro & Petro Prod	18.6	18.8	18.3	17.8	18.0	18.1	18.9	18.2	17.7	18.3
Chem & Rel Prod	13.3	11.7	9.1	9.4	10.0	10.4	10.6	10.7	9.8	10.1
Crude Materials	38.1	41.0	47.0	45.3	49.1	51.1	55.3	57.9	60.0	61.5
Primary Manuf Goods	6.5	7.0	7.2	7.4	7.5	8.6	11.2	11.6	11.7	11.1
Food & Farm Prod	12.5	15.2	15.3	15.0	16.9	20.0	16.6	17.4	15.0	15.3
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0

*Figure 3-9*  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997  
 FOR THE OHIO RIVER SYSTEM  
 (million short tons and percentage of short tons)

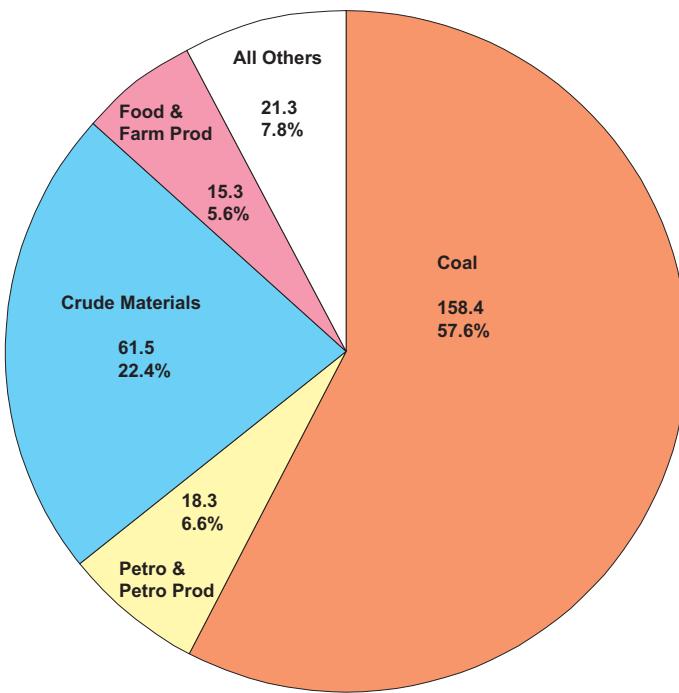


Table 3-9: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997  
 FOR THE OHIO RIVER SYSTEM  
 (million short tons)

	1996	1997	%Change
<b>Total Commerce</b>	<b>270.9</b>	<b>274.9</b>	<b>1.4</b>
Coal	156.5	158.4	1.2
Petroleum & Petroleum Products	17.7	18.3	3.3
Chemicals & Related Products	9.8	10.1	2.9
Crude Materials	60.0	61.5	2.5
Primary Manufactured Goods	11.7	11.1	-4.5
Food & Farm Products	15.0	15.3	2.4
Other	0.2	0.0	-76.9

Figure 3-10  
GREAT LAKES, 1978-1997  
BY TYPE OF TRAFFIC  
(million short tons)

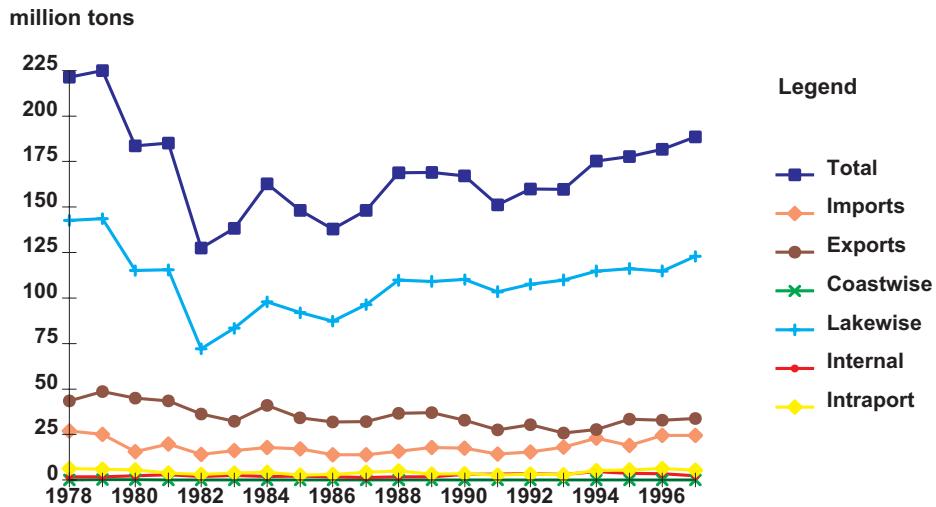


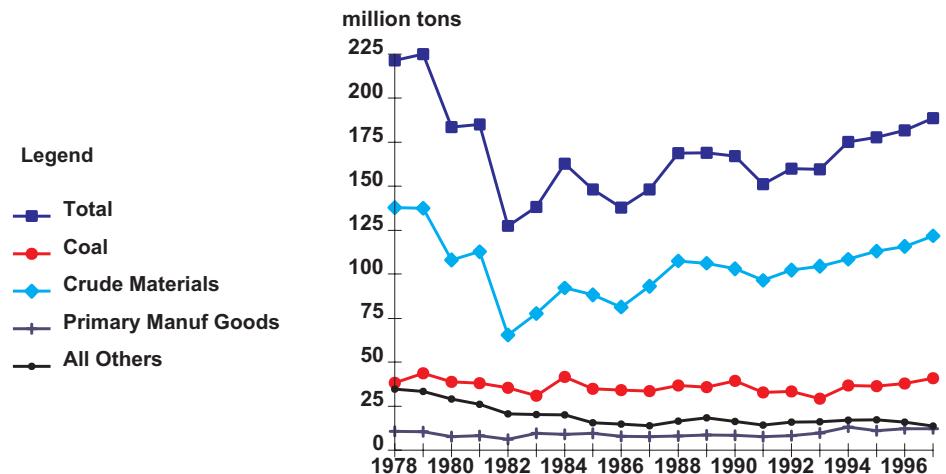
Table 3-10: GREAT LAKES, 1978-1997  
BY TYPE OF TRAFFIC\*  
(million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>221.4</b>	<b>225.0</b>	<b>183.5</b>	<b>185.1</b>	<b>127.4</b>	<b>138.2</b>	<b>162.8</b>	<b>148.1</b>	<b>137.9</b>	<b>148.1</b>
Imports	27.1	25.1	15.5	19.7	14.1	16.1	17.8	17.1	13.8	13.9
Exports	43.6	48.7	45.1	43.5	36.3	32.3	40.9	34.2	32.0	32.1
Coastwise	0.1	0.1	0.1	0.0	-	-	0.0	0.0	-	0.0
Lakewise	142.7	143.6	115.1	115.4	72.1	83.5	98.0	92.0	87.4	96.5
Internal	1.7	1.6	2.3	2.8	1.9	2.5	1.8	2.2	1.7	1.4
Intraport	6.3	5.9	5.4	3.7	3.0	3.8	4.2	2.7	3.0	4.3

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>168.8</b>	<b>168.9</b>	<b>167.1</b>	<b>151.1</b>	<b>159.9</b>	<b>159.6</b>	<b>175.3</b>	<b>177.8</b>	<b>181.8</b>	<b>188.6</b>
Imports	15.9	17.8	17.6	14.2	15.4	18.1	23.1	18.9	24.5	24.5
Exports	36.6	37.1	32.9	27.5	30.4	25.8	27.8	33.5	32.8	33.7
Coastwise	-	0.0	0.0	-	0.0	0.0	0.0	-	-	-
Lakewise	109.7	109.1	110.2	103.4	107.4	109.9	114.8	116.2	115.0	122.8
Internal	1.6	1.7	3.1	3.2	3.4	3.1	4.6	3.6	3.3	2.3
Intraport	5.0	3.3	3.4	2.7	3.3	2.8	5.0	5.5	6.2	5.2

\* Exports include Great Lakes Thru Foreign Traffic.

*Figure 3-11*  
 GREAT LAKES, 1978-1997  
 BY COMMODITY GROUP  
 (million short tons)



*Table 3-11: GREAT LAKES, 1978-1997*  
 BY COMMODITY GROUP  
 (million short tons)

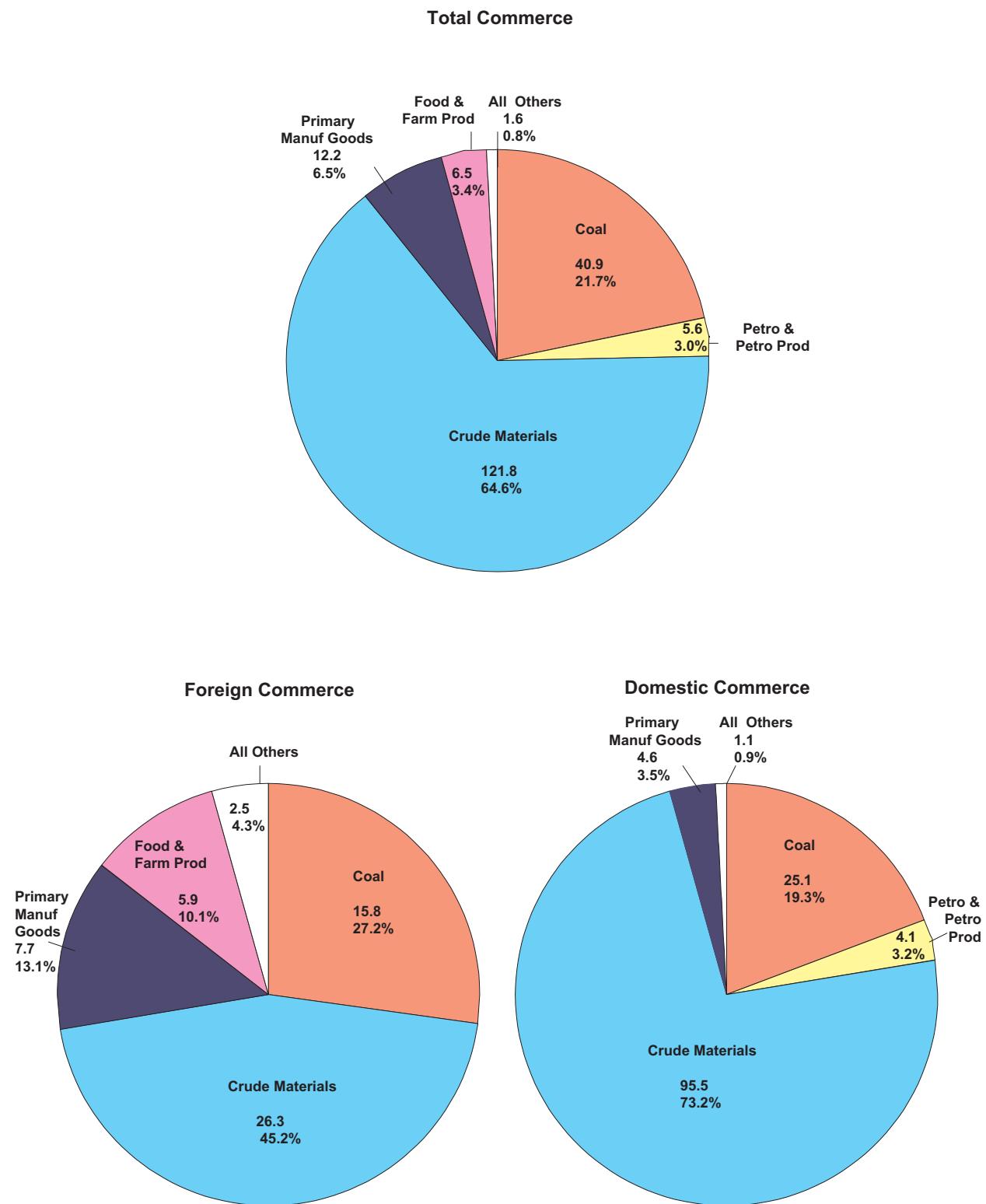
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>221.4</b>	<b>225.0</b>	<b>183.5</b>	<b>185.1</b>	<b>127.4</b>	<b>138.2</b>	<b>162.8</b>	<b>148.1</b>	<b>137.9</b>	<b>148.1</b>
Coal	38.3	43.7	38.7	38.1	35.4	31.0	41.6	34.8	34.1	33.6
Petro & Petro Prod	12.0	11.7	8.9	7.5	5.9	5.3	5.5	5.1	5.3	4.9
Chem & Rel Prod	1.7	2.3	2.4	2.9	2.6	2.2	2.6	2.7	2.4	2.3
Crude Materials	137.8	137.4	108.1	112.8	65.3	77.5	92.2	88.2	81.3	93.1
Primary Manuf Goods	10.7	10.4	7.6	8.3	6.1	9.5	9.1	9.5	7.8	7.6
Food & Farm Prod	20.4	18.8	17.4	15.2	11.8	9.8	11.6	7.6	6.8	6.4
All Manuf Equip	0.5	0.6	0.4	0.4	0.3	2.8	0.2	0.2	0.2	0.2
Other	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>168.8</b>	<b>168.9</b>	<b>167.1</b>	<b>151.1</b>	<b>159.9</b>	<b>159.6</b>	<b>175.3</b>	<b>177.8</b>	<b>181.8</b>	<b>188.6</b>
Coal	36.7	35.7	39.4	32.8	33.4	29.2	36.7	36.3	37.8	40.9
Petro & Petro Prod	6.5	6.3	6.4	5.5	5.8	5.2	5.9	5.5	6.2	5.6
Chem & Rel Prod	2.4	2.5	2.7	2.2	1.9	1.7	1.6	1.6	1.5	1.4
Crude Materials	107.5	106.2	103.1	96.5	102.2	104.5	108.4	113.1	115.9	121.8
Primary Manuf Goods	8.1	8.7	8.4	7.6	8.3	9.7	13.1	11.1	12.1	12.2
Food & Farm Prod	7.1	8.6	6.2	5.2	6.9	7.6	8.6	10.0	8.1	6.5
All Manuf Equip	0.4	0.8	1.0	1.1	1.3	1.4	0.8	0.2	0.2	0.2
Other	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0

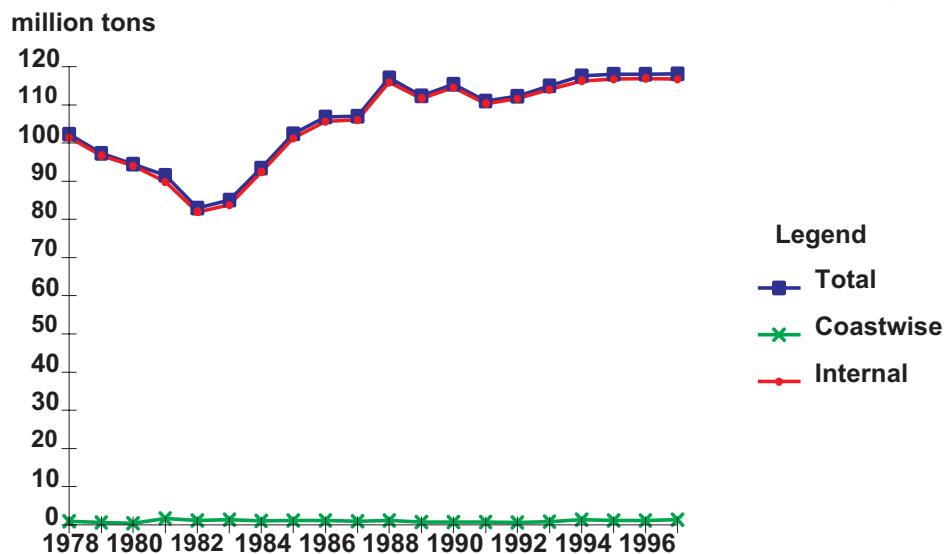
Table 3-12: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997  
 FOR THE GREAT LAKES  
 (million short tons)

	1996	1997	%Change
<b>Total Commerce</b>	<b>181.8</b>	<b>188.6</b>	<b>3.7</b>
Coal	37.8	40.9	8.2
Petro & Petro Prod	6.2	5.6	-10.2
Chem & Rel Prod	1.5	1.4	-9.4
Crude Materials	115.9	121.8	5.1
Primary Manuf Goods	12.1	12.2	0.8
Food and Farm Prod	8.1	6.5	-19.7
Other	0.2	0.2	24.4
<b>Foreign Commerce</b>	<b>57.3</b>	<b>58.2</b>	<b>1.7</b>
Coal	12.2	15.8	30.1
Petro & Petro Prod	2.1	1.5	-29.5
Chem & Rel Prod	1.0	0.9	-10.6
Crude Materials	26.1	26.3	0.8
Primary Manuf Goods	8.1	7.7	-5.8
Food and Farm Prod	7.7	5.9	-22.8
Other	0.1	0.2	31.9
<b>Domestic Commerce</b>	<b>124.5</b>	<b>130.3</b>	<b>4.7</b>
Coal	25.7	25.1	-2.2
Petro & Petro Prod	4.1	4.1	-0.4
Chem & Rel Prod	0.5	0.5	-6.8
Crude Materials	89.7	95.5	6.4
Primary Manuf Goods	4.0	4.6	14.0
Food and Farm Prod	0.4	0.6	36.4
Other	0.0	0.0	-2.3

*Figure 3-12*  
**PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997**  
**FOR THE GREAT LAKES**  
*(million short tons and percentage of tons)*



*Figure 3-13*  
**GULF INTRACOASTAL WATERWAY, 1978-1997**  
 BY TYPE OF TRAFFIC  
 (million short tons)

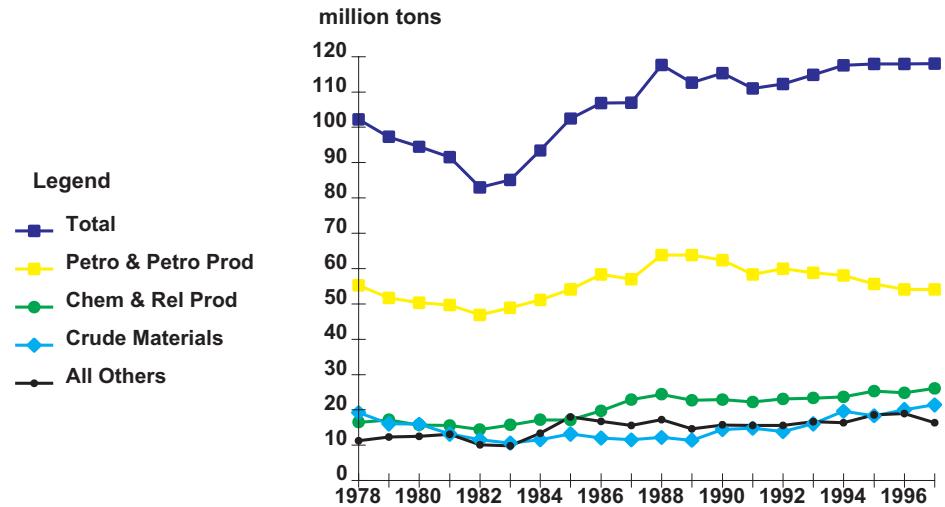


*Table 3-13: GULF INTRACOASTAL WATERWAY, 1978-1997*  
 BY TYPE OF TRAFFIC  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>102.3</b>	<b>97.3</b>	<b>94.5</b>	<b>91.6</b>	<b>83.0</b>	<b>85.1</b>	<b>93.4</b>	<b>102.5</b>	<b>107.0</b>	<b>107.0</b>
Imports	-	-	-	-	-	-	-	0.0	0.0	0.0
Exports	-	-	-	-	-	-	0.0	0.0	0.1	0.0
Coastwise	0.9	0.6	0.4	1.7	1.1	1.3	1.0	1.1	1.2	0.9
Internal	101.4	96.7	94.1	89.9	81.9	83.8	92.4	101.3	105.7	106.1

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>117.7</b>	<b>112.7</b>	<b>115.4</b>	<b>111.0</b>	<b>112.3</b>	<b>114.9</b>	<b>117.6</b>	<b>118.0</b>	<b>118.0</b>	<b>118.1</b>
Imports	0.4	0.3	-	-	-	-	-	-	-	-
Exports	0.2	0.1	-	-	-	-	-	-	-	-
Coastwise	1.2	0.8	0.7	0.7	0.7	0.9	1.3	1.2	1.1	1.3
Internal	115.9	111.6	114.6	110.3	111.6	114.1	116.3	116.8	116.9	116.8

*Figure 3-14*  
**GULF INTRACOASTAL WATERWAY, 1978-1997**  
 BY COMMODITY GROUP  
 (million short tons)

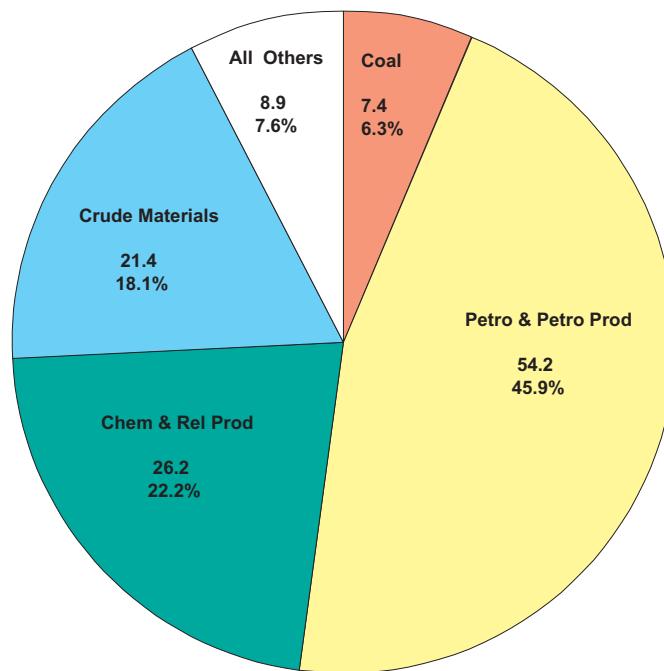


*Table 3-14: GULF INTRACOASTAL WATERWAY, 1978-1997*  
 BY COMMODITY GROUP  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>102.3</b>	<b>97.3</b>	<b>94.5</b>	<b>91.6</b>	<b>83.0</b>	<b>85.1</b>	<b>93.4</b>	<b>102.5</b>	<b>107.0</b>	<b>107.0</b>
Coal	4.0	5.0	5.1	4.6	4.0	3.9	6.8	7.2	8.8	8.0
Petrol & Petrol Prod	55.3	51.8	50.4	49.7	46.9	49.0	51.2	54.2	58.4	57.0
Chem & Rel Prod	16.5	17.2	15.7	15.6	14.5	15.8	17.3	17.1	19.8	22.9
Crude Materials	19.2	16.0	15.9	13.2	11.5	10.6	11.6	13.1	12.1	11.5
Primary Manuf Goods	3.0	3.1	3.4	4.3	2.6	2.6	3.2	4.5	3.3	3.2
Food & Farm Prod	2.6	2.6	2.3	2.3	1.9	1.7	1.9	3.2	3.0	2.7
All Manuf Equip	0.9	0.6	0.6	0.7	0.4	0.4	0.4	1.6	0.7	0.7
Other	0.8	1.0	1.1	1.2	1.3	1.2	1.2	1.5	1.0	1.1

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>117.7</b>	<b>112.7</b>	<b>115.4</b>	<b>111.0</b>	<b>112.3</b>	<b>114.9</b>	<b>117.6</b>	<b>118.0</b>	<b>118.0</b>	<b>118.1</b>
Coal	8.0	7.5	9.2	8.4	8.4	8.4	8.3	8.0	8.3	7.4
Petrol & Petrol Prod	63.8	63.8	62.4	58.4	60.0	58.9	58.1	55.7	54.2	54.2
Chem & Rel Prod	24.4	22.8	22.9	22.2	23.2	23.4	23.6	25.3	24.9	26.2
Crude Materials	12.2	11.4	14.4	14.8	13.9	16.0	19.6	18.3	20.1	21.4
Primary Manuf Goods	3.9	2.7	3.0	3.6	2.9	3.2	3.4	3.9	4.9	4.3
Food & Farm Prod	3.3	2.9	2.2	2.2	2.1	2.6	2.4	1.8	1.9	1.6
All Manuf Equip	1.0	0.5	0.4	0.3	0.5	0.8	0.8	4.1	3.0	2.0
Other	1.2	1.2	0.8	1.1	1.3	1.6	1.4	0.8	0.9	0.9

*Figure 3-15*  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997  
 FOR THE GULF INTRACOASTAL WATERWAY  
 (million short tons and percentage of short tons)



*Table 3-15: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997*  
 FOR THE GULF INTRACOASTAL WATERWAY  
 (million short tons)

	1996	1997	% Change
<b>Total Commerce</b>	<b>118.0</b>	<b>118.1</b>	<b>0.1</b>
Coal	8.3	7.4	-10.0
Petroleum & Petroleum Products	54.2	54.2	-0.0
Chemicals & Related Products	24.9	26.2	5.1
Crude Materials	20.1	21.4	6.8
Primary Manufactured Goods	4.9	4.3	-10.9
Food & Farm Products	1.9	1.6	-14.3
All Manuf Equip	3.0	2.0	-31.3
Other	0.9	0.9	4.7

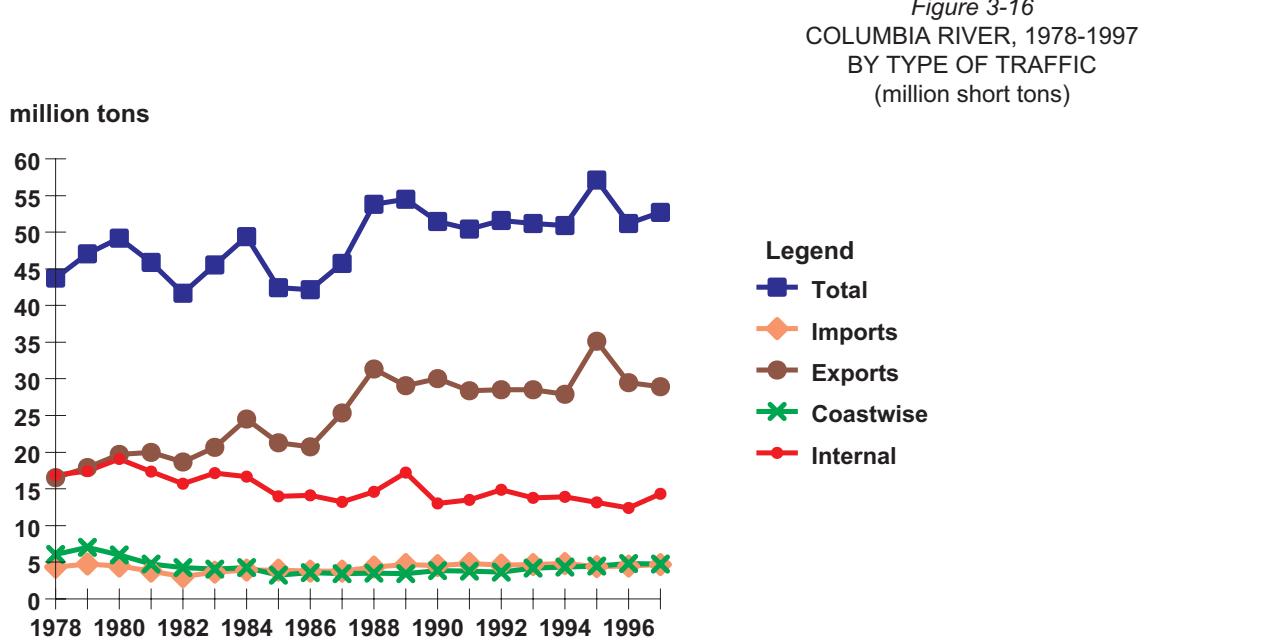


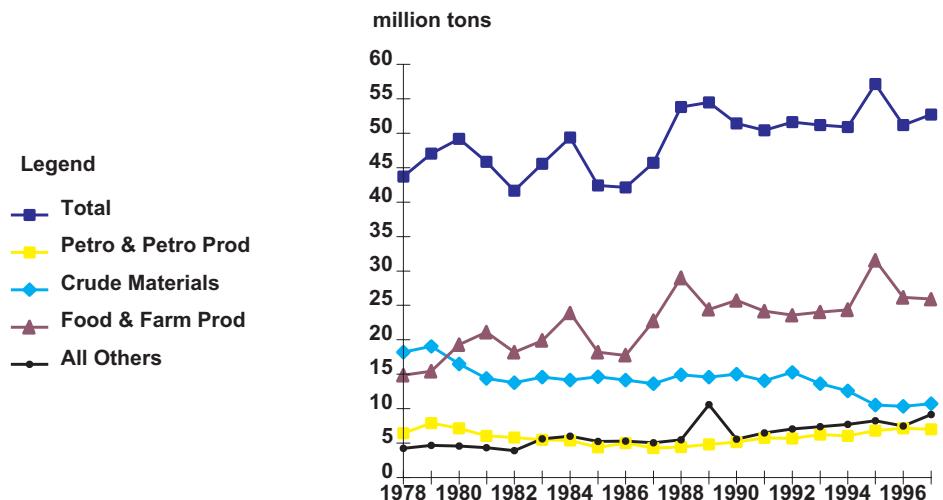
Table 3-16: COLUMBIA RIVER, 1978-1997  
BY TYPE OF TRAFFIC\*  
(million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<b>Total</b>	<b>43.7</b>	<b>47.1</b>	<b>49.2</b>	<b>45.9</b>	<b>41.7</b>	<b>45.6</b>	<b>49.4</b>	<b>42.4</b>	<b>42.2</b>	<b>45.7</b>
Imports	4.3	4.8	4.5	3.8	3.1	3.7	4.0	3.9	3.8	3.8
Exports	16.5	17.9	19.7	20.0	18.6	20.7	24.5	21.3	20.7	25.3
Coastwise	6.0	7.0	6.0	4.8	4.3	4.1	4.3	3.2	3.6	3.4
Internal	16.9	17.4	19.1	17.4	15.7	17.1	16.6	14.0	14.1	13.2

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Total</b>	<b>53.8</b>	<b>54.5</b>	<b>51.4</b>	<b>50.4</b>	<b>51.6</b>	<b>51.2</b>	<b>50.9</b>	<b>57.1</b>	<b>51.2</b>	<b>52.7</b>
Imports	4.3	4.7	4.5	4.8	4.6	4.7	4.8	4.4	4.5	4.7
Exports	31.3	29.1	30.0	28.4	28.5	28.5	27.9	35.1	29.5	28.9
Coastwise	3.5	3.5	3.9	3.8	3.6	4.2	4.3	4.5	4.8	4.8
Internal	14.6	17.2	13.0	13.5	14.9	13.8	13.9	13.1	12.4	14.3

\*Imports include Upbound Thru Traffic. Exports include Downbound Thru Traffic.

*Figure 3-17*  
 COLUMBIA RIVER, 1978-1997  
 BY COMMODITY GROUP  
 (million short tons)



*Table 3-17: COLUMBIA RIVER, 1978-1997*  
 BY COMMODITY GROUP  
 (million short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total	<b>43.7</b>	<b>47.1</b>	<b>49.2</b>	<b>45.9</b>	<b>41.7</b>	<b>45.6</b>	<b>49.4</b>	<b>42.4</b>	<b>42.2</b>	<b>45.7</b>
Coal	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.4	0.5
Petro & Petro Prod	6.4	7.9	7.1	6.1	5.8	5.5	5.4	4.4	5.0	4.3
Chem & Rel Prod	1.5	1.5	1.6	1.4	0.9	1.4	1.7	1.9	1.9	2.1
Crude Materials	18.2	19.0	16.5	14.4	13.8	14.6	14.1	14.6	14.1	13.6
Primary Manuf Goods	2.2	2.3	2.1	2.1	1.7	2.1	2.3	2.3	2.2	1.9
Food & Farm Prod	14.9	15.4	19.3	21.1	18.2	19.9	23.9	18.2	17.8	22.8
All Manuf Equip	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.4
Other	0.0	0.4	0.3	0.3	0.8	1.5	1.1	0.2	0.0	0.1

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total	<b>53.8</b>	<b>54.5</b>	<b>51.4</b>	<b>50.4</b>	<b>51.6</b>	<b>51.2</b>	<b>50.9</b>	<b>57.1</b>	<b>51.2</b>	<b>52.7</b>
Coal	0.5	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Petro & Petro Prod	4.4	4.8	5.1	5.8	5.7	6.2	6.0	6.8	7.1	7.0
Chem & Rel Prod	2.0	2.3	2.7	3.1	3.7	4.0	4.1	4.4	3.9	4.9
Crude Materials	14.9	14.6	15.0	14.1	15.3	13.6	12.6	10.5	10.4	10.7
Primary Manuf Goods	2.1	2.1	2.3	2.3	2.5	2.5	2.8	2.9	2.6	2.9
Food & Farm Prod	29.0	24.4	25.7	24.2	23.6	24.0	24.4	31.6	26.2	25.9
All Manuf Equip	0.8	0.7	0.6	0.7	0.7	0.7	0.8	0.8	0.8	1.1
Other	0.0	5.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2

**Table 3-18: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997  
FOR THE COLUMBIA RIVER  
(million short tons)**

	1996	1997	%Change
<b>Total Commerce</b>	<b>51.2</b>	<b>52.7</b>	<b>3.0</b>
Coal	0.0	0.0	*
Petro & Petro Prod	7.1	7.0	-2.2
Chem & Rel Prod	3.9	4.9	25.0
Crude Materials	10.4	10.7	3.5
Primary Manuf Goods	2.6	2.9	12.1
Food & Farm Prod	26.2	25.9	-1.1
All Manuf Equip	0.8	1.1	39.1
Other	0.2	0.2	7.5
 <b>Foreign Commerce</b>	 <b>34.0</b>	 <b>33.6</b>	 <b>-1.2</b>
Coal	0.0	0.0	*
Petro & Petro Prod	1.1	1.3	19.5
Chem & Rel Prod	3.3	4.1	24.7
Crude Materials	6.7	5.4	-18.9
Primary Manuf Goods	2.0	2.2	10.3
Food & Farm Prod	20.3	19.9	-2.3
All Manuf Equip	0.6	0.7	11.1
Other	0.0	0.0	-42.0
 <b>Domestic Commerce</b>	 <b>17.2</b>	 <b>19.1</b>	 <b>11.4</b>
Coal	-	-	-
Petro & Petro Prod	6.1	5.7	-6.1
Chem & Rel Prod	0.6	0.7	26.1
Crude Materials	3.7	5.3	44.3
Primary Manuf Goods	0.6	0.7	17.5
Food & Farm Prod	5.9	6.0	2.8
All Manuf Equip	0.2	0.4	141.5
Other	0.2	0.2	11.4

\* Greater than 500%

*Figure 3-18*  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997  
 FOR THE COLUMBIA RIVER  
 (million short tons and percentage of short tons)

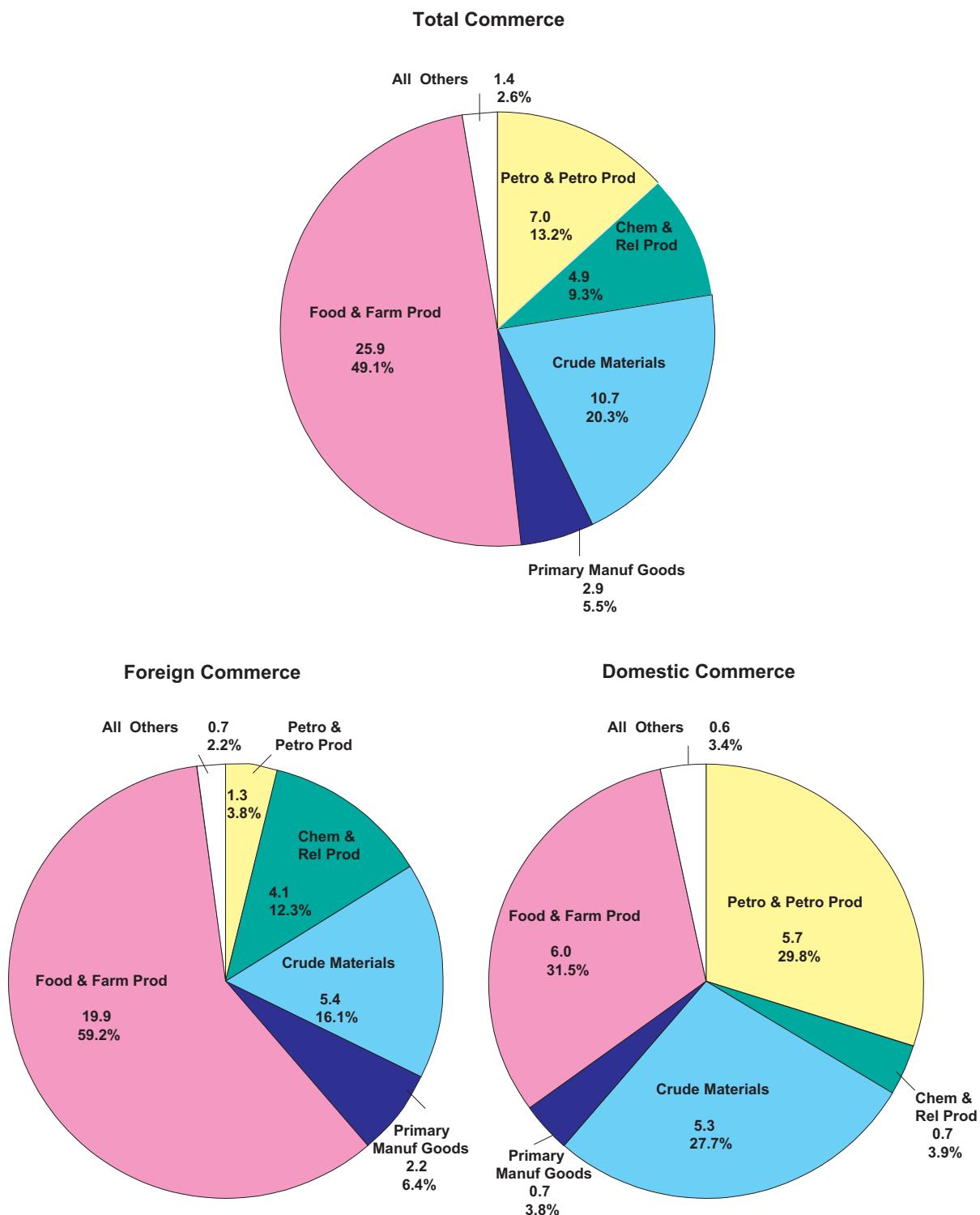


Figure 3-19  
SNAKE RIVER, 1978-1997  
BY COMMODITY GROUP  
(thousand short tons)

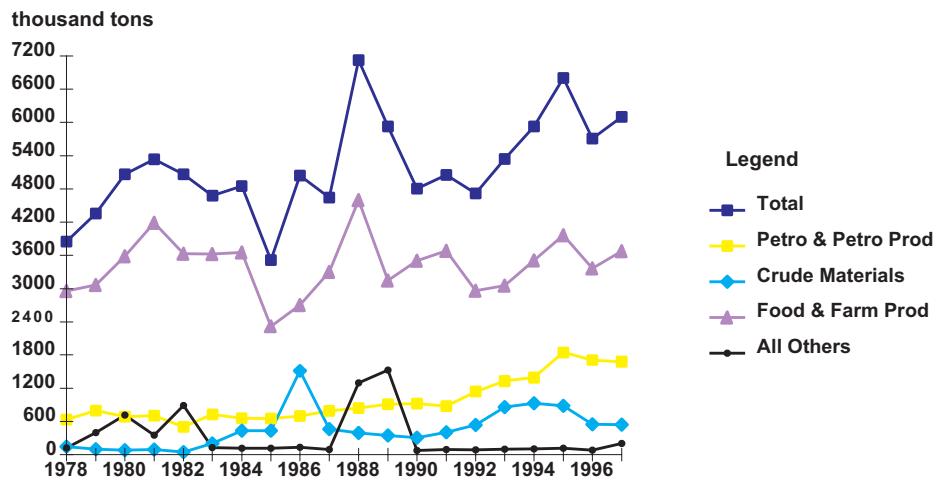
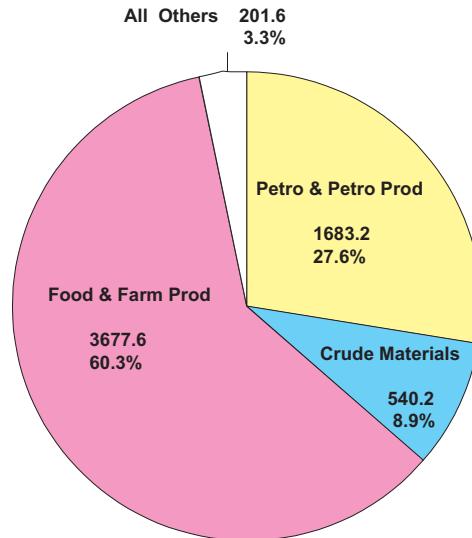


Table 3-19: SNAKE RIVER, 1978-1997  
BY COMMODITY GROUP  
(thousand short tons)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total	3,852.3	4,356.7	5,063.6	5,053.2	5,065.3	4,679.1	4,852.0	3,518.8	5,042.6	4,644.9
Petro & Petro Prod	631.0	791.5	687.2	702.7	501.8	724.8	654.0	652.7	694.8	789.5
Chem & Rel Prod	56.9	45.1	56.8	41.4	51.0	25.7	26.3	27.2	45.2	36.2
Crude Materials	144.5	100.3	81.1	94.1	47.1	202.7	429.8	434.5	1,512.8	461.3
Primary Manuf Goods	59.2	76.6	37.7	34.0	35.5	85.2	71.7	74.4	45.9	45.6
Food & Farm Prod	2,957.9	3,065.8	3,583.6	4,187.4	3,629.9	3,625.3	3,653.5	2,316.8	2,704.4	3,301.3
All Manuf Equip	1.2	1.8	5.8	6.2	8.0	15.5	16.7	13.2	38.5	10.0
Waste & Scrap	-	264.5	611.4	269.4	792.0	-	-	-	0.9	1.0
Other	1.7	11.2	-	-	-	-	-	-	-	-

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total	7,125.1	5,930.3	4,804.0	5,053.2	4,719.3	5,339.1	5,929.1	6,803.9	5,707.4	6,102.5
Petro & Petro Prod	839.1	908.4	920.0	875.1	1,140.4	1,328.9	1,391.3	1,847.6	1,708.8	1,683.2
Chem & Rel Prod	22.9	33.1	14.8	41.3	35.4	50.9	43.4	41.3	52.0	30.5
Crude Materials	390.3	347.2	304.8	404.1	533.6	858.6	925.9	878.9	548.5	540.2
Primary Manuf Goods	52.2	45.3	53.8	45.0	43.2	40.0	46.0	64.5	18.0	69.8
Food & Farm Prod	4,601.1	3,148.8	3,503.2	3,682.4	2,961.4	3,055.8	3,510.7	3,963.6	3,369.1	3,677.6
All Manuf Equip	57.2	9.9	7.3	5.3	5.3	4.9	11.8	8.0	10.8	101.3
Waste & Scrap	1,162.2	1,437.5	-	-	-	-	-	-	0.2	-
Other	-	-	-	-	-	-	-	-	-	-

*Figure 3-20*  
 PRINCIPAL COMMODITY GROUPS CARRIED BY WATER, 1997  
 FOR THE SNAKE RIVER  
 (thousand short tons and percentage of short tons)



*Table 3-20: PRINCIPAL COMMODITIES IN WATERBORNE COMMERCE, 1996-1997  
 FOR THE SNAKE RIVER  
 (thousand short tons)*

	1996	1997	% Change
<b>Total Commerce</b>	<b>5,707.4</b>	<b>6,102.5</b>	6.9
Petroleum & Petroleum Products	1,708.8	1,683.2	-1.5
Chemicals & Related Products	52.0	30.5	-41.4
Crude Materials	548.5	540.2	-1.5
Primary Manufactured Goods	18.0	69.8	288.3
Food & Farm Products	3,369.1	3,677.6	9.2
All Manufactured Equipment	10.8	101.3	*
Waste & Scrap	0.2	-	-

\* Greater than 500%

## Section 4

### States

**Table 4-1: WATERBORNE COMMERCE BY STATES, 1997**  
(thousand short tons)

State	Total*	Shipping		Receiving		Intrastate
		Domestic	Foreign	Domestic	Foriegn	
<b>Total</b>	<b>2,333,142</b>	<b>782,250</b>	<b>432,313</b>	<b>782,250</b>	<b>788,303</b>	<b>330,277</b>
Alabama	71,551	9,991	11,691	19,651	13,169	17,049
Alaska	94,383	72,131	11,234	2,896	929	7,194
Arkansas	13,404	5,735	-	4,943	-	2,726
California	171,806	6,368	43,089	48,132	54,178	20,040
Connecticut	19,741	1,413	225	13,426	3,112	1,564
Delaware	24,299	14,239	557	1,313	5,065	3,125
District of Columbia	706	-	-	706	-	-
Florida	124,456	14,152	19,513	61,541	25,609	3,640
Georgia	20,991	889	8,301	2,678	8,914	210
Guam	427	29	-	398	-	-
Hawaii	21,348	954	1,019	5,278	7,345	6,751
Idaho	1,647	1,011	-	90	-	546
Illinois	109,346	76,696	592	19,312	3,271	9,474
Indiana	82,074	20,892	252	54,983	2,305	3,642
Iowa	13,598	9,076	-	3,816	-	706
Kansas	307	242	-	65	-	-
Kentucky	87,292	47,681	-	27,077	-	12,535
Louisiana	492,952	104,634	104,483	131,692	110,682	41,461
Maine	19,999	10	317	2,671	16,761	240
Maryland	49,807	6,037	15,092	9,217	15,047	4,413
Massachusetts	27,460	1,437	684	10,188	12,780	2,372
Michigan	82,865	29,240	5,569	23,798	8,230	16,029
Minnesota	55,264	39,508	5,755	7,067	848	2,087
Mississippi	49,775	13,993	4,097	10,857	19,607	1,221
Missouri	31,459	15,694	-	7,738	-	8,027
Nebraska	348	230	-	113	-	5
New Hampshire	3,954	39	59	990	2,862	3
New Jersey	97,939	29,817	6,426	26,864	30,364	4,469
New York	103,479	21,593	3,254	23,250	39,907	15,474
North Carolina	13,540	296	3,447	3,304	3,655	2,838
Ohio	134,244	30,365	15,821	61,474	6,407	20,178
Oklahoma	4,014	2,298	-	1,685	-	31
Oregon	36,696	3,659	15,946	7,799	3,529	5,764
Other	47,523	8,513	-	8,400	30,609	1
Pacific Islands	60	2	-	58	-	-
Pennsylvania	119,151	17,450	844	38,306	42,121	20,430
Puerto Rico	28,200	2,242	1,288	8,250	13,188	3,232
Rhode Island	9,457	461	415	5,053	3,471	56
South Carolina	19,512	325	7,260	4,407	7,427	93
Tennessee	47,472	7,649	-	36,399	-	3,424
Texas	422,592	47,405	54,604	22,682	246,057	51,845
Trans-Ship**	1,467	1,292	-	175	-	-
Vermont	-	-	-	-	-	-
Virgin Islands	45,303	18,217	1,384	1,723	23,491	488
Virginia	77,683	12,326	43,697	5,105	9,703	6,852
Washington	117,799	12,403	40,261	32,448	15,919	16,768
West Virginia	79,472	49,806	-	16,678	-	12,988
Wisconsin	38,530	23,810	5,137	7,553	1,742	288

\* Excludes duplication.

\*\* Ports and offshore anchorages where cargo is moved from one vessel to another. These are St. Lucia, Virgin Islands, Heald Bank off LA-TX coast, Cherique Grande, Panama, Puerto Amuelles, Panama and Hondo Platform-Pacific Ocean.

Table 4-2: WATERBORNE COMMERCE BY STATES, 1997, RANKED BY TOTAL TONS  
(thousand short tons)

State	Total*	Shipping		Receiving		Intrastate
		Domestic	Foreign	Domestic	Foreign	
<b>Total</b>	<b>2,333,142</b>	<b>782,250</b>	<b>432,313</b>	<b>782,250</b>	<b>788,303</b>	<b>330,277</b>
Louisiana	492,952	104,634	104,483	131,692	110,682	41,461
Texas	422,592	47,405	54,604	22,682	246,057	51,845
California	171,806	6,368	43,089	48,132	54,178	20,040
Ohio	134,244	30,365	15,821	61,474	6,407	20,178
Florida	124,456	14,152	19,513	61,541	25,609	3,640
Pennsylvania	119,151	17,450	844	38,306	42,121	20,430
Washington	117,799	12,403	40,261	32,448	15,919	16,768
Illinois	109,346	76,696	592	19,312	3,271	9,474
New York	103,479	21,593	3,254	23,250	39,907	15,474
New Jersey	97,939	29,817	6,426	26,864	30,364	4,469
Alaska	94,383	72,131	11,234	2,896	929	7,194
Kentucky	87,292	47,681	-	27,077	-	12,535
Michigan	82,865	29,240	5,569	23,798	8,230	16,029
Indiana	82,074	20,892	252	54,983	2,305	3,642
West Virginia	79,472	49,806	-	16,678	-	12,988
Virginia	77,683	12,326	43,697	5,105	9,703	6,852
Alabama	71,551	9,991	11,691	19,651	13,169	17,049
Minnesota	55,264	39,508	5,755	7,067	848	2,087
Maryland	49,807	6,037	15,092	9,217	15,047	4,413
Mississippi	49,775	13,993	4,097	10,857	19,607	1,221
Other	47,523	8,513	-	8,400	30,609	1
Tennessee	47,472	7,649	-	36,399	-	3,424
Virgin Islands	45,303	18,217	1,384	1,723	23,491	488
Wisconsin	38,530	23,810	5,137	7,553	1,742	288
Oregon	36,696	3,659	15,946	7,799	3,529	5,764
Missouri	31,459	15,694	-	7,738	-	8,027
Puerto Rico	28,200	2,242	1,288	8,250	13,188	3,232
Massachusetts	27,460	1,437	684	10,188	12,780	2,372
Delaware	24,299	14,239	557	1,313	5,065	3,125
Hawaii	21,348	954	1,019	5,278	7,345	6,751
Georgia	20,991	889	8,301	2,678	8,914	210
Maine	19,999	10	317	2,671	16,761	240
Connecticut	19,741	1,413	225	13,426	3,112	1,564
South Carolina	19,512	325	7,260	4,407	7,427	93
Iowa	13,598	9,076	-	3,816	-	706
North Carolina	13,540	296	3,447	3,304	3,655	2,838
Arkansas	13,404	5,735	-	4,943	-	2,726
Rhode Island	9,457	461	415	5,053	3,471	56
Oklahoma	4,014	2,298	-	1,685	-	31
New Hampshire	3,954	39	59	990	2,862	3
Idaho	1,647	1,011	-	90	-	546
Trans-Ship**	1,467	1,292	-	175	-	-
District of Columbia	706	-	-	706	-	-
Guam	427	29	-	398	-	-
Nebraska	348	230	-	113	-	5
Kansas	307	242	-	65	-	-
Pacific Islands	60	2	-	58	-	-
Vermont	-	-	-	-	-	-

\* Excludes duplication.

\*\* Ports and offshore anchorages where cargo is moved from one vessel to another. These are St. Lucia, Virgin Islands, Heald Bank off LA-TX coast, Cherique Grande, Panama, Puerto Amuelles, Panama and Hondo Platform-Pacific Ocean.

*Table 4-3: U.S. COMMERCIAL LANDINGS OF FISH, BY STATES, 1996 AND 1997\**  
 (thousand pounds)

State	1996	1997	% Change	Year	Record Landing
<b>Total</b>	<b>9,564,888</b>	<b>9,845,685</b>	<b>2.9</b>	-	-
Alabama	26,579	23,076	-13.2	1973	36,744
Alaska	5,012,875	4,765,002	-4.9	1993	5,905,638
California	460,681	648,715	40.8	1936	1,760,193
Connecticut	20,949	19,396	-7.4	1930	88,012
Delaware	5,958	8,649	45.2	1953	367,500
Florida	134,038	114,727	-14.4	1938	241,443
Georgia	13,117	14,511	10.6	1927	47,607
Hawaii	31,870	36,568	14.7	1993	34,582
Illinois	202	154	-23.8	-	**
Indiana	303	158	-47.9	-	**
Louisiana	1,130,639	1,426,495	26.2	1984	1,931,027
Maine	236,567	244,059	3.2	1950	356,266
Maryland	69,179	76,627	10.8	1890	141,607
Massachusetts	236,550	229,991	-2.8	1948	649,696
Michigan	14,174	15,874	12.0	1930	35,580
Minnesota	584	472	-19.2	-	**
Mississippi	160,283	177,782	10.9	1984	476,997
New Hampshire	11,047	10,919	-1.2	-	**
New Jersey	179,306	168,289	-6.1	1956	540,060
New York	56,732	60,013	5.8	1880	335,000
North Carolina	193,828	229,729	18.5	1981	432,006
Ohio	4,258	3,970	-6.8	1936	31,083
Oregon	264,113	273,503	3.6	1997	23,503
Pennsylvania	311	13	-95.8	-	**
Rhode Island	136,708	138,693	1.5	1957	142,080
South Carolina	15,788	17,023	7.8	1965	26,611
Texas	91,593	85,650	-6.5	1960	237,684
Virginia	659,651	611,515	-7.3	1990	786,794
Washington	391,741	438,567	12.0	1994	527,804
Wisconsin	5,264	5,545	5.3	-	**

Source: U.S. Department of Commerce, National Marine Fisheries Service.

\* Landings are reported in round (live) weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). Landings for Mississippi River Drainage Area States are not available.

\*\* Data not available.

## Section 5

### Ports

*Table 5-1: SELECTED U.S. PORTS BY PORT NAME, 1997  
(short tons)*

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
70	Albany, NY	6,818,912	1,324,301	1,252,443	71,858	5,494,611
103	Alpena, MI	2,901,331	261,069	74,610	186,459	2,640,262
47	Anacortes, WA	13,903,514	1,719,226	672,316	1,046,910	12,184,288
93	Anchorage, AK	3,424,079	1,045,489	410,581	634,908	2,378,590
51	Ashtabula, OH	11,928,900	6,288,294	710,453	5,577,841	5,640,606
20	Baltimore, MD	40,028,849	25,222,074	14,971,414	10,250,660	14,806,775
64	Barbers Point, Oahu, HI	8,161,884	5,131,901	4,259,366	872,535	3,029,983
6	Baton Rouge, LA	84,023,102	38,406,994	28,575,663	9,831,331	45,616,108
15	Beaumont, TX	48,665,380	33,626,741	28,234,027	5,392,714	15,038,639
128	Bellingham, WA	1,555,242	1,049,981	690,807	359,174	505,261
111	Biloxi, MS	2,521,187	-	-	-	2,521,187
32	Boston, MA	20,892,983	10,989,456	10,317,904	671,552	9,903,527
80	Bridgeport, CT	5,340,257	936,449	919,498	16,951	4,403,808
114	Brownsville, TX	2,284,248	891,735	662,539	229,196	1,392,513
110	Brunswick, GA	2,697,924	2,512,741	1,526,934	985,807	185,183
143	Bucksport, ME	1,152,571	776,823	776,823	-	375,748
119	Buffalo, NY	1,894,025	823,215	771,115	52,100	1,070,810
132	Buffington, IN	1,499,961	-	-	-	1,499,961
55	Burns Waterway Harbor, IN	10,414,413	1,783,423	1,717,402	66,021	8,630,990
57	Calcite, MI	10,036,159	2,149,867	149,216	2,000,651	7,886,292
73	Camden-Gloucester, NJ	6,570,495	4,197,577	3,481,435	716,142	2,372,918
41	Charleston, SC	17,874,161	13,123,246	5,939,086	7,184,160	4,750,915
131	Charlevoix, MI	1,528,883	75,708	-	75,708	1,453,175
150	Charlotte, FL	1,066,881	-	-	-	1,066,881
101	Chattanooga, TN	3,031,139	-	-	-	3,031,139
28	Chicago, IL	24,867,996	3,862,968	3,271,231	591,737	21,005,028
49	Cincinnati, OH	12,878,606	-	-	-	12,878,606
38	Cleveland, OH	18,113,321	3,339,500	3,165,069	174,431	14,773,821
74	Conneaut, OH	6,205,402	2,000,180	59,229	1,940,951	4,205,222
98	Coos Bay, OR	3,163,720	2,780,773	82,196	2,698,577	382,947
5	Corpus Christi, TX	86,843,760	62,218,692	54,215,016	8,003,676	24,625,068
37	Detroit, MI	18,135,326	6,114,276	5,614,244	500,032	12,021,050
127	Drummond Island, MI	1,559,995	267,613	-	267,613	1,292,382
18	Duluth-Superior, MN and WI	41,928,885	10,774,747	847,587	9,927,160	31,154,138
142	Erie, PA	1,162,953	94,886	91,930	2,956	1,068,067
69	Escanaba, MI	7,260,911	-	-	-	7,260,911
91	Everett, WA	3,639,638	1,035,190	569,444	465,746	2,604,448
96	Fairport Harbor, OH	3,296,405	383,709	79,610	304,099	2,912,696
95	Fall River, MA	3,393,547	941,689	933,337	8,352	2,451,858
26	Freeport, TX	26,280,731	21,140,066	19,172,508	1,967,558	5,140,665
56	Galveston, TX	10,126,322	6,105,617	3,184,405	2,921,212	4,020,705
54	Gary, IN	10,417,015	256,854	129,755	127,099	10,160,161
130	Georgetown, SC	1,535,040	1,464,829	1,412,793	52,036	70,211
134	Grays Harbor, WA	1,485,991	1,189,976	131	1,189,845	296,015
115	Green Bay, WI	2,129,681	238,857	223,226	15,631	1,890,824
106	Greenville, MS	2,808,368	-	-	-	2,808,368
112	Gulfport, MS	2,448,429	2,366,223	1,493,183	873,040	82,206
108	Guntersville, AL	2,764,521	-	-	-	2,764,521
120	Helena, AR	1,810,133	-	-	-	1,810,133
137	Hempstead, NY	1,293,850	-	-	-	1,293,850

Table 5-1: SELECTED U.S. PORTS BY PORT NAME, 1997 (continued)  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
133	Hilo, HI	1,489,206	79,138	79,138	-	1,410,068
50	Honolulu, HI	12,703,903	3,037,476	2,890,906	146,570	9,666,427
136	Hopewell, VA	1,362,311	522,462	48,285	474,177	839,849
2	Houston, TX	165,456,278	102,846,554	72,640,589	30,205,965	62,609,724
140	Humboldt, CA	1,175,109	646,929	4,508	642,421	528,180
27	Huntington, WV	25,175,459	-	-	-	25,175,459
42	Indiana Harbor, IN	16,523,799	516,774	457,414	59,360	16,007,025
36	Jacksonville, FL	18,186,104	8,890,487	7,398,244	1,492,243	9,295,617
104	Kahului, Maui, HI	2,894,803	28,587	28,587	-	2,866,216
63	Kalama, WA	8,300,698	7,276,119	58,077	7,218,042	1,024,579
94	Kansas City, MO	3,417,348	-	-	-	3,417,348
141	Kelleys Island, OH	1,170,252	-	-	-	1,170,252
139	Ketchikan, AK	1,241,301	333,357	11,809	321,548	907,944
124	Klawock, AK	1,636,816	123,000	-	123,000	1,513,816
13	Lake Charles, LA	51,278,579	29,710,037	25,190,443	4,519,594	21,568,542
9	Long Beach, CA	57,255,301	38,356,545	21,175,723	17,180,822	18,898,756
78	Longview, WA	5,539,857	4,433,363	408,985	4,024,378	1,106,494
44	Lorain, OH	15,954,569	540,980	540,980	-	15,413,589
19	Los Angeles, CA	41,774,252	28,579,542	16,201,305	12,378,237	13,194,710
60	Louisville, KY	9,043,176	-	-	-	9,043,176
92	Marblehead, OH	3,619,300	206,345	-	206,345	3,412,955
31	Marcus Hook, PA	21,520,244	11,567,652	11,394,793	172,859	9,952,592
87	Marine City, MI	4,000,903	-	-	-	4,000,903
146	Marysville, MI	1,142,100	267,239	248,339	18,900	874,861
59	Matagorda Ship Channel, TX	9,428,731	6,670,465	5,938,788	731,677	2,758,266
39	Memphis, TN	18,015,173	-	-	-	18,015,173
71	Miami, FL	6,612,206	5,323,417	2,787,669	2,535,748	1,288,789
97	Milwaukee, WI	3,265,042	1,525,604	1,344,722	180,882	1,739,438
125	Minneapolis, MN	1,619,328	-	-	-	1,619,328
14	Mobile, AL	49,120,007	24,844,100	13,169,050	11,675,050	24,275,907
109	Monroe, MI	2,749,560	12,494	12,494	-	2,737,066
82	Morehead City, NC	5,200,583	3,212,517	910,112	2,302,405	1,988,066
75	Mount Vernon, IN	5,863,403	-	-	-	5,863,403
117	Muskegon, MI	2,061,110	290,370	290,370	-	1,770,740
90	Nashville, TN	3,904,419	-	-	-	3,904,419
149	Nawiliwili, Kauai, HI	1,090,722	-	-	-	1,090,722
67	New Castle, DE	7,469,503	1,485,608	1,457,593	28,015	5,983,895
58	New Haven, CT	9,593,835	2,261,549	2,053,454	208,095	7,332,286
4	New Orleans, LA	89,441,772	52,438,422	23,924,557	28,513,865	37,003,350
3	New York, NY and NJ	135,266,431	56,713,855	48,122,399	8,591,456	78,552,576
33	Newport News, VA	20,755,282	14,645,859	1,378,593	13,267,266	6,109,423
72	Nikishka, AK	6,608,630	1,982,725	145,154	1,837,571	4,625,905
16	Norfolk Harbor, VA	46,322,012	35,417,051	5,933,603	29,483,448	10,904,961
53	Oakland, CA	10,857,892	8,530,951	3,089,563	5,441,388	2,326,941
118	Olympia, WA	1,996,607	131,573	5,449	126,124	1,865,034
102	Palm Beach, FL	2,921,709	1,089,357	402,455	686,902	1,832,352
105	Panama City, FL	2,878,245	683,011	166,384	516,627	2,195,234
23	Pascagoula, MS	31,270,055	21,249,144	18,081,418	3,167,726	10,020,911
29	Paulsboro, NJ	24,391,944	13,696,249	13,516,240	180,009	10,695,695
144	Penn Manor, PA	1,150,602	1,020,686	987,831	32,855	129,916

**Table 5-1: SELECTED U.S. PORTS BY PORT NAME, 1997 (continued)**  
 (short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
122	Pensacola, FL	1,674,188	205,033	51,437	153,596	1,469,155
17	Philadelphia, PA	44,967,869	29,957,511	29,490,353	467,158	15,010,358
12	Pittsburgh, PA	51,662,378	-	-	-	51,662,378
8	Plaquemines, LA, Port of	63,607,222	16,648,172	5,495,185	11,152,987	46,959,050
113	Port Angeles, WA	2,377,086	653,505	141,750	511,755	1,723,581
21	Port Arthur, TX	37,318,229	29,728,939	26,946,644	2,782,295	7,589,290
99	Port Canaveral, FL	3,146,996	1,865,660	1,310,592	555,068	1,281,336
88	Port Dolomite, MI	3,991,727	251,232	-	251,232	3,740,495
35	Port Everglades, FL	19,924,784	7,965,562	6,126,585	1,838,977	11,959,222
81	Port Inland, MI	5,304,842	404,973	30,281	374,692	4,899,869
107	Port Jefferson, NY	2,792,591	90,480	90,480	-	2,702,111
100	Port Manatee, FL	3,107,582	898,669	591,231	307,438	2,208,913
43	Portland, ME	16,333,742	14,648,885	14,575,783	73,102	1,684,857
24	Portland, OR	29,560,776	16,538,732	3,370,151	13,168,581	13,022,044
89	Portsmouth, NH	3,953,875	2,921,233	2,862,022	59,211	1,032,642
52	Presque Isle, MI	11,200,514	1,235,191	7,805	1,227,386	9,965,323
61	Providence, RI	8,813,884	3,634,263	3,278,953	355,310	5,179,621
138	Redwood City, CA	1,293,426	696,678	346,654	350,024	596,748
30	Richmond, CA	21,705,683	5,220,841	3,446,500	1,774,341	16,484,842
148	Richmond, VA	1,121,156	515,267	239,219	276,048	605,889
145	Sacramento, CA	1,143,083	1,007,609	232,964	774,645	135,474
126	Salem, MA	1,599,442	732,107	731,900	207	867,335
121	San Diego, CA	1,724,493	787,589	417,913	369,676	936,904
46	San Juan, PR	14,067,151	4,939,606	4,316,317	623,289	9,127,545
85	Sandusky, OH	4,403,328	2,549,123	4,964	2,544,159	1,854,205
40	Savannah, GA	17,929,269	14,701,939	7,386,671	7,315,268	3,227,330
129	Searsport, ME	1,537,484	1,256,920	1,223,564	33,356	280,564
25	Seattle, WA	26,564,230	18,650,546	7,848,268	10,802,278	7,913,684
79	Silver Bay, MN	5,488,727	698,364	-	698,364	4,790,363
1	South Louisiana, LA, Port of	183,628,353	76,782,064	26,414,598	50,367,466	106,846,289
76	St. Clair, MI	5,699,364	-	-	-	5,699,364
22	St. Louis, MO and IL	31,287,584	-	-	-	31,287,584
84	St. Paul, MN	4,866,033	-	-	-	4,866,033
123	Stockton, CA	1,647,036	1,463,517	683,079	780,438	183,519
65	Stoneport, MI	8,100,939	307,542	5,512	302,030	7,793,397
34	Tacoma, WA	20,683,326	13,079,680	4,202,695	8,876,985	7,603,646
62	Taconite, MN	8,606,953	-	-	-	8,606,953
11	Tampa, FL	55,333,607	18,603,685	7,255,497	11,348,188	36,729,922
10	Texas City, TX	56,645,675	37,430,678	35,061,311	2,369,367	19,214,997
45	Toledo, OH	14,421,587	6,912,550	1,839,616	5,072,934	7,509,037
147	Trenton, NJ	1,124,266	-	-	-	1,124,266
116	Tulsa, Port of Catoosa, OK	2,107,393	-	-	-	2,107,393
48	Two Harbors, MN	13,507,844	70,116	-	70,116	13,437,728
7	Valdez, AK	73,647,151	3,540,109	36,761	3,503,348	70,107,042
66	Vancouver, WA	7,838,282	5,222,049	770,283	4,451,766	2,616,233
77	Vicksburg, MS	5,627,234	-	-	-	5,627,234
83	Victoria, TX	4,999,658	-	-	-	4,999,658
135	Weodon Island, FL	1,455,343	-	-	-	1,455,343
86	Wilmington, DE	4,400,881	3,287,179	2,815,426	471,753	1,113,702
68	Wilmington, NC	7,441,358	3,889,449	2,744,548	1,144,901	3,551,909

**Table 5-2: SELECTED U.S. PORTS BY PORT NAME, 1997, RANKED BY TOTAL TONS  
(short tons)**

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
1	South Louisiana, LA, Port of	183,628,353	76,782,064	26,414,598	50,367,466	106,846,289
2	Houston, TX	165,456,278	102,846,554	72,640,589	30,205,965	62,609,724
3	New York, NY and NJ	135,266,431	56,713,855	48,122,399	8,591,456	78,552,576
4	New Orleans, LA	89,441,772	52,438,422	23,924,557	28,513,865	37,003,350
5	Corpus Christi, TX	86,843,760	62,218,692	54,215,016	8,003,676	24,625,068
6	Baton Rouge, LA	84,023,102	38,406,994	28,575,663	9,831,331	45,616,108
7	Valdez, AK	73,647,151	3,540,109	36,761	3,503,348	70,107,042
8	Plaquemines, LA, Port of	63,607,222	16,648,172	5,495,185	11,152,987	46,959,050
9	Long Beach, CA	57,255,301	38,356,545	21,175,723	17,180,822	18,898,756
10	Texas City, TX	56,645,675	37,430,678	35,061,311	2,369,367	19,214,997
11	Tampa, FL	55,333,607	18,603,685	7,255,497	11,348,188	36,729,922
12	Pittsburgh, PA	51,662,378	-	-	-	51,662,378
13	Lake Charles, LA	51,278,579	29,710,037	25,190,443	4,519,594	21,568,542
14	Mobile, AL	49,120,007	24,844,100	13,169,050	11,675,050	24,275,907
15	Beaumont, TX	48,665,380	33,626,741	28,234,027	5,392,714	15,038,639
16	Norfolk Harbor, VA	46,322,012	35,417,051	5,933,603	29,483,448	10,904,961
17	Philadelphia, PA	44,967,869	29,957,511	29,490,353	467,158	15,010,358
18	Duluth-Superior, MN and WI	41,928,885	10,774,747	847,587	9,927,160	31,154,138
19	Los Angeles, CA	41,774,252	28,579,542	16,201,305	12,378,237	13,194,710
20	Baltimore, MD	40,028,849	25,222,074	14,971,414	10,250,660	14,806,775
21	Port Arthur, TX	37,318,229	29,728,939	26,946,644	2,782,295	7,589,290
22	St. Louis, MO and IL	31,287,584	-	-	-	31,287,584
23	Pascagoula, MS	31,270,055	21,249,144	18,081,418	3,167,726	10,020,911
24	Portland, OR	29,560,776	16,538,732	3,370,151	13,168,581	13,022,044
25	Seattle, WA	26,564,230	18,650,546	7,848,268	10,802,278	7,913,684
26	Freeport, TX	26,280,731	21,140,066	19,172,508	1,967,558	5,140,665
27	Huntington, WV	25,175,459	-	-	-	25,175,459
28	Chicago, IL	24,867,996	3,862,968	3,271,231	591,737	21,005,028
29	Paulsboro, NJ	24,391,944	13,696,249	13,516,240	180,009	10,695,695
30	Richmond, CA	21,705,683	5,220,841	3,446,500	1,774,341	16,484,842
31	Marcus Hook, PA	21,520,244	11,567,652	11,394,793	172,859	9,952,592
32	Boston, MA	20,892,983	10,989,456	10,317,904	671,552	9,903,527
33	Newport News, VA	20,755,282	14,645,859	1,378,593	13,267,266	6,109,423
34	Tacoma, WA	20,683,326	13,079,680	4,202,695	8,876,985	7,603,646
35	Port Everglades, FL	19,924,784	7,965,562	6,126,585	1,838,977	11,959,222
36	Jacksonville, FL	18,186,104	8,890,487	7,398,244	1,492,243	9,295,617
37	Detroit, MI	18,135,326	6,114,276	5,614,244	500,032	12,021,050
38	Cleveland, OH	18,113,321	3,339,500	3,165,069	174,431	14,773,821
39	Memphis, TN	18,015,173	-	-	-	18,015,173
40	Savannah, GA	17,929,269	14,701,939	7,386,671	7,315,268	3,227,330
41	Charleston, SC	17,874,161	13,123,246	5,939,086	7,184,160	4,750,915
42	Indiana Harbor, IN	16,523,799	516,774	457,414	59,360	16,007,025
43	Portland, ME	16,333,742	14,648,885	14,575,783	73,102	1,684,857
44	Lorain, OH	15,954,569	540,980	540,980	-	15,413,589
45	Toledo, OH	14,421,587	6,912,550	1,839,616	5,072,934	7,509,037
46	San Juan, PR	14,067,151	4,939,606	4,316,317	623,289	9,127,545
47	Anacortes, WA	13,903,514	1,719,226	672,316	1,046,910	12,184,288
48	Two Harbors, MN	13,507,844	70,116	-	70,116	13,437,728
49	Cincinnati, OH	12,878,606	-	-	-	12,878,606
50	Honolulu, HI	12,703,903	3,037,476	2,890,906	146,570	9,666,427

Table 5-2: SELECTED U.S. PORTS BY PORT NAME, 1997, RANKED BY TOTAL TONS (continued)  
(short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
51	Ashtabula, OH	11,928,900	6,288,294	710,453	5,577,841	5,640,606
52	Presque Isle, MI	11,200,514	1,235,191	7,805	1,227,386	9,965,323
53	Oakland, CA	10,857,892	8,530,951	3,089,563	5,441,388	2,326,941
54	Gary, IN	10,417,015	256,854	129,755	127,099	10,160,161
55	Burns Waterway Harbor, IN	10,414,413	1,783,423	1,717,402	66,021	8,630,990
56	Galveston, TX	10,126,322	6,105,617	3,184,405	2,921,212	4,020,705
57	Calcite, MI	10,036,159	2,149,867	149,216	2,000,651	7,886,292
58	New Haven, CT	9,593,835	2,261,549	2,053,454	208,095	7,332,286
59	Matagorda Ship Channel, TX	9,428,731	6,670,465	5,938,788	731,677	2,758,266
60	Louisville, KY	9,043,176	-	-	-	9,043,176
61	Providence, RI	8,813,884	3,634,263	3,278,953	355,310	5,179,621
62	Taconite, MN	8,606,953	-	-	-	8,606,953
63	Kalama, WA	8,300,698	7,276,119	58,077	7,218,042	1,024,579
64	Barbers Point, Oahu, HI	8,161,884	5,131,901	4,259,366	872,535	3,029,983
65	Stoneport, MI	8,100,939	307,542	5,512	302,030	7,793,397
66	Vancouver, WA	7,838,282	5,222,049	770,283	4,451,766	2,616,233
67	New Castle, DE	7,469,503	1,485,608	1,457,593	28,015	5,983,895
68	Wilmington, NC	7,441,358	3,889,449	2,744,548	1,144,901	3,551,909
69	Escanaba, MI	7,260,911	-	-	-	7,260,911
70	Albany, NY	6,818,912	1,324,301	1,252,443	71,858	5,494,611
71	Miami, FL	6,612,206	5,323,417	2,787,669	2,535,748	1,288,789
72	Nikishka, AK	6,608,630	1,982,725	145,154	1,837,571	4,625,905
73	Camden-Gloucester, NJ	6,570,495	4,197,577	3,481,435	716,142	2,372,918
74	Conneaut, OH	6,205,402	2,000,180	59,229	1,940,951	4,205,222
75	Mount Vernon, IN	5,863,403	-	-	-	5,863,403
76	St. Clair, MI	5,699,364	-	-	-	5,699,364
77	Vicksburg, MS	5,627,234	-	-	-	5,627,234
78	Longview, WA	5,539,857	4,433,363	408,985	4,024,378	1,106,494
79	Silver Bay, MN	5,488,727	698,364	-	698,364	4,790,363
80	Bridgeport, CT	5,340,257	936,449	919,498	16,951	4,403,808
81	Port Inland, MI	5,304,842	404,973	30,281	374,692	4,899,869
82	Morehead City, NC	5,200,583	3,212,517	910,112	2,302,405	1,988,066
83	Victoria, TX	4,999,658	-	-	-	4,999,658
84	St. Paul, MN	4,866,033	-	-	-	4,866,033
85	Sandusky, OH	4,403,328	2,549,123	4,964	2,544,159	1,854,205
86	Wilmington, DE	4,400,881	3,287,179	2,815,426	471,753	1,113,702
87	Marine City, MI	4,000,903	-	-	-	4,000,903
88	Port Dolomite, MI	3,991,727	251,232	-	251,232	3,740,495
89	Portsmouth, NH	3,953,875	2,921,233	2,862,022	59,211	1,032,642
90	Nashville, TN	3,904,419	-	-	-	3,904,419
91	Everett, WA	3,639,638	1,035,190	569,444	465,746	2,604,448
92	Marblehead, OH	3,619,300	206,345	-	206,345	3,412,955
93	Anchorage, AK	3,424,079	1,045,489	410,581	634,908	2,378,590
94	Kansas City, MO	3,417,348	-	-	-	3,417,348
95	Fall River, MA	3,393,547	941,689	933,337	8,352	2,451,858
96	Fairport Harbor, OH	3,296,405	383,709	79,610	304,099	2,912,696
97	Milwaukee, WI	3,265,042	1,525,604	1,344,722	180,882	1,739,438
98	Coos Bay, OR	3,163,720	2,780,773	82,196	2,698,577	382,947
99	Port Canaveral, FL	3,146,996	1,865,660	1,310,592	555,068	1,281,336
100	Port Manatee, FL	3,107,582	898,669	591,231	307,438	2,208,913

**Table 5-2: SELECTED U.S. PORTS BY PORT NAME, 1997, RANKED BY TOTAL TONS (continued)**  
 (short tons)

Rank	Port Name	Total	Foreign	Imports	Exports	Domestic
101	Chattanooga, TN	3,031,139	-	-	-	3,031,139
102	Palm Beach, FL	2,921,709	1,089,357	402,455	686,902	1,832,352
103	Alpena, MI	2,901,331	261,069	74,610	186,459	2,640,262
104	Kahului, Maui, HI	2,894,803	28,587	28,587	-	2,866,216
105	Panama City, FL	2,878,245	683,011	166,384	516,627	2,195,234
106	Greenville, MS	2,808,368	-	-	-	2,808,368
107	Port Jefferson, NY	2,792,591	90,480	90,480	-	2,702,111
108	Guntersville, AL	2,764,521	-	-	-	2,764,521
109	Monroe, MI	2,749,560	12,494	12,494	-	2,737,066
110	Brunswick, GA	2,697,924	2,512,741	1,526,934	985,807	185,183
111	Biloxi, MS	2,521,187	-	-	-	2,521,187
112	Gulfport, MS	2,448,429	2,366,223	1,493,183	873,040	82,206
113	Port Angeles, WA	2,377,086	653,505	141,750	511,755	1,723,581
114	Brownsville, TX	2,284,248	891,735	662,539	229,196	1,392,513
115	Green Bay, WI	2,129,681	238,857	223,226	15,631	1,890,824
116	Tulsa, Port of Catoosa, OK	2,107,393	-	-	-	2,107,393
117	Muskegon, MI	2,061,110	290,370	290,370	-	1,770,740
118	Olympia, WA	1,996,607	131,573	5,449	126,124	1,865,034
119	Buffalo, NY	1,894,025	823,215	771,115	52,100	1,070,810
120	Helena, AR	1,810,133	-	-	-	1,810,133
121	San Diego, CA	1,724,493	787,589	417,913	369,676	936,904
122	Pensacola, FL	1,674,188	205,033	51,437	153,596	1,469,155
123	Stockton, CA	1,647,036	1,463,517	683,079	780,438	183,519
124	Klawock, AK	1,636,816	123,000	-	123,000	1,513,816
125	Minneapolis, MN	1,619,328	-	-	-	1,619,328
126	Salem, MA	1,599,442	732,107	731,900	207	867,335
127	Drummond Island, MI	1,559,995	267,613	-	267,613	1,292,382
128	Bellingham, WA	1,555,242	1,049,981	690,807	359,174	505,261
129	Searsport, ME	1,537,484	1,256,920	1,223,564	33,356	280,564
130	Georgetown, SC	1,535,040	1,464,829	1,412,793	52,036	70,211
131	Charlevoix, MI	1,528,883	75,708	-	75,708	1,453,175
132	Buffington, IN	1,499,961	-	-	-	1,499,961
133	Hilo, HI	1,489,206	79,138	79,138	-	1,410,068
134	Grays Harbor, WA	1,485,991	1,189,976	131	1,189,845	296,015
135	Weedon Island, FL	1,455,343	-	-	-	1,455,343
136	Hopewell, VA	1,362,311	522,462	48,285	474,177	839,849
137	Hempstead, NY	1,293,850	-	-	-	1,293,850
138	Redwood City, CA	1,293,426	696,678	346,654	350,024	596,748
139	Ketchikan, AK	1,241,301	333,357	11,809	321,548	907,944
140	Humboldt, CA	1,175,109	646,929	4,508	642,421	528,180
141	Kelleys Island, OH	1,170,252	-	-	-	1,170,252
142	Erie, PA	1,162,953	94,886	91,930	2,956	1,068,067
143	Bucksport, ME	1,152,571	776,823	776,823	-	375,748
144	Penn Manor, PA	1,150,602	1,020,686	987,831	32,855	129,916
145	Sacramento, CA	1,143,083	1,007,609	232,964	774,645	135,474
146	Marysville, MI	1,142,100	267,239	248,339	18,900	874,861
147	Trenton, NJ	1,124,266	-	-	-	1,124,266
148	Richmond, VA	1,121,156	515,267	239,219	276,048	605,889
149	Nawiliwili, Kauai, HI	1,090,722	-	-	-	1,090,722
150	Charlotte, FL	1,066,881	-	-	-	1,066,881